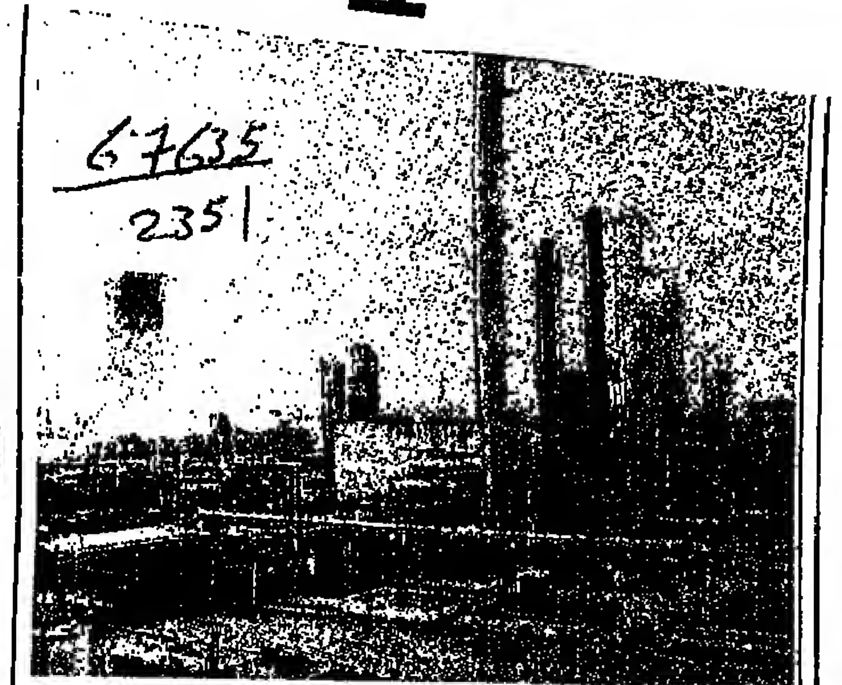
Chemical Marketing Reporter

© Entire contents copyright 1986 by Schnell Publishing Company, Inc.



BP Pushes LLDPE 3

NEWSPAPER · SECOND CLASS · JUNE 9, 1986 · $2.25 an issue; $65 a year

INSIDE CMR

DU PONT SHIFT: The company sets up a new automotive unit with annual sales of $2 billion based at Michigan center. Autos are the company's biggest market.......**Page 3**

[illegible]OTECHNOLOGY: Con[illegible]ssman's bill that would cre[illegible] new agency to oversee the developing biotechnology in[illegible]stry is attacked by industry. [illegible] urged. ....**Page 5**

INTERFERON: FDA ap[illegible]oves the [illegible]se of human alpha [illegible]feron for treatment of hairy cell leukemia. Schering-Plough, [illegible]ogen, Roche bring product to market.............**Page 5**

TSCA: EPA issues a final rule requiring chemical manufacturers and importers to report current production and plant site information covering thousands [illegible] ....**Page 4**

[illegible]ORP: The diversified Swedish company raises its international sales 12 percent from [illegible]r's level, acquires business of La Bakelite SA of France..............**Page 9**

ORTHOXYLENE: Following six years of 7 percent annual declines in consumption, US producers see a 'mini-recovery' that could last until 1990. Capacity still excessive....**Page 7**

DDT CASE: Olin agrees to a $15 million compensation fund to settle litigation over DDT exposure in Northern Alabama arsenal. Hearings set for Fall.................**Page 7**

Advertisers' Index	49
CMR Bus[illegible] Briefs	60
Chemical Financial Briefs	9
Chemical Imports	41
Chemical Prices	32
Chemical Profile	50
Classified Advertisements	48
Jobs & People	61
Meetings Calendar	[illegible]
Obituary	[illegible]
Co[illegible] index on Back Cover	

Consumer Groups Ask FDA Ban on Methylene Chloride

Two consumer groups asked a Federal judge last week to order Food & Drug Administration to ban methylene chloride, a suspected carcinogen that is routinely used to decaffeinate coffee.

Consumer Federation of America and Public Citizen said in a suit filed in US District Court that FDA and Health and Human Services Department are violating the Delaney Clause of the Food, Drug and Cosmetic Act—a provision that requires a ban on chemicals that cause cancer in animals.

The suit said several scientific studies have found that methylene chloride causes cancer in the livers and lungs of mice and may cause cancer in the mammary and saliva glands as well.

Last December, FDA proposed to ban the chemical's use in cosmetic products, but said the amount used to take caffeine out of coffee is "considered to be safe." It said fewer than one out of one million people would develop cancer from lifetime consumption of coffee treated with methylene chloride.

FDA spokesman Emil Corwin said until the agency is able to examine the complaint in detail and consider its implications, "Our position is the same as it was in December."

Katherine Meyer, the attorney representing the consumer groups, said, "The law clearly provides that food additives that cause cancer in animals must be banned from the food supply. Anything less than a total ban violates the law and deprives consumers of the protection Congress intended.

"The FDA's unwillingness to abide by the law is particularly egregious in light of the fact that some manufacturers of decaffeinated coffee use safe alternatives, such as water, in the decaffeination process," Miss Meyer said.

"Unfortunately, consumers cannot tell which brands use methylene chloride simply by reading the labels," she added.

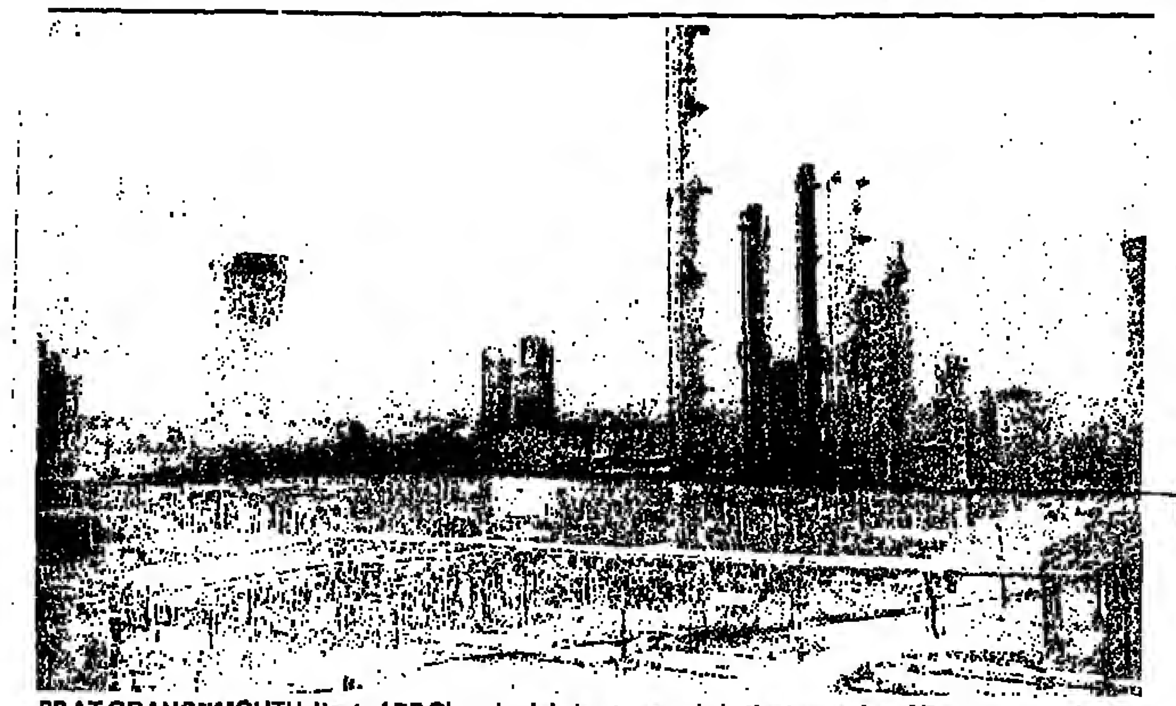
The lawsuit also claimed Federal officials decided that "only a small number of cancers will be caused by exposure to the substance" in decaffeinated coffee and did not propose a ban on that use.

The FDA decision "is disastrous— it would allow the Reagan Administration to continue to ignore the laws enacted to protect the public's health, in favor of protecting the profits of the food industry," said Dr. Sidney Wolf, director of Public Citizen's Health Research Group.

The potential cancer-causing effects of methylene chloride are being investigated by Environmental Protection Agency, Consumer Product Safety Commission, and Occupational Safety and Health Administration, as well as by FDA.

The Halogenated Solvents Industry Alliance, a trade group representing all methylene chloride producers, maintains: "Consumer safety is one of the reasons methylene chloride has been safely and widely used for some 50 years." The producers have questioned the relevance of certain animal tests to humans, and are in the process of conducting further tests.

The trade group notes that epidemiology studies of 1,200 workers exposed to methylene chloride over a 20-year period showed no increase in cancer.



BP AT GRANGEMOUTH: Part of BP Chemicals' plan to remain in the top ranks of European producers of linear low-density polyethylene includes new capacity at its huge Grangemouth chemicals complex in Scotland.

Chemical Marketing Reporter

Volume 229 June 9, 1986 Number 23

BP Pushing for Bigger Share Of Fast-Growing LLDPE Market With Lavera Facility, UK Plans

Linear low-density polyethylene will push up its share of the Western European polyethylene market from 10 percent at present to 25 percent by 1990, predicts BP Chemicals International (BPCI), British Petroleum's chemicals subsidiary.

BPCI itself expects to take a sizeable share of that increase at the premium end of the market following the commissioning earlier this year of its new gas-phase LLDPE plant at Lavera, near Marseilles, France, run by its French subsidiary, BP Chimie.

The company is also expected to announce later this year the building of a second European LLDPE plant at Grangemouth in Scotland, where it already has substantial polyethylene capacity.

Linear low is the key to BPCI's plans to remain a leading force in Europe's polyethylene market.

The company has pinpointed polyethylene, along with acetic acid and specialty chemicals and plastics like performance polymers and polyisobutenes, as the three main sectors on which to concentrate its future investment and research.

"We have the strength in raw material and marketing as well as the technological resources to make polyethylenes a strategically important area for us," said Ray Knowland, BPCI's managing director at a press conference at the official opening of the Lavera plant May 29.

The company is already one of the region's major polyethylene producers with capacity of around 600,000 metric tons a year.

Current negotiations with Bayer of Germany for BPCI to take over the marketing of the polyethylene from the companies' joint venture Erdolchemie at Worringen in West Germany would make it the number two producer in Europe, with a total capacity of 880,000 tons.

Unlike the US, linear low poly has been slow to penetrate the European polyethylene market, but has been considerably boosted by a flow of imports over the last two years from three LLDPE plants in Saudi Arabia. Output from two of these plants is marketed

Continued on Page 49

Ray Knowland

DuPont Sets Automotive Unit With $2 Billion in Annual Sales

E.I. du Pont de Nemours & Co. has set up a new industrial department, to be called the automotive products department, that will combine the company's automotive businesses which account for $2 billion in annual sales. The worldwide automotive industry represents Du Pont's single largest market segment. Commenting on formation of the new unit, Edgar S. Woolard, Jr., vice-chairman of Du Pont, said it "represents a major restructuring of our resources" to serve the automotive industry worldwide.

DU PONT AUTO CENTER: Troy, Mich. Du Pont executives examine a display featuring "Bexloy" automotive engineering resin and "Surlyn" ionomer resins application in automotive parts.

He pointed out that if the new unit was an independent company it would "rank among *Fortune's* list of the nation's top 200 firms."

Headquartered at Du Pont's $25 million corporate automotive development center in Troy, Mich., which was dedicated last year, the department will be headed by John P. McAndrews, group vice-president. The Du Pont executive formerly headed the finishes and fabricated products department and will relocate to Detroit.

PRODUCTS FOR AUTOS

Mr. McAndrews says the new department will allow the company to better concentrate on the worldwide automotive industry with its products which range from high performance finishes and thermoplastics to structural composites, electronics and specialty polymers, films and chemicals.

"The total opportunity for automotive materials is tremendous," he says, "and we fully expect this opportunity to increase four-fold by the year 2000."

Additionally, he notes a trend toward providing component systems to auto makers and says he believes Du Pont will become a major systems supplier based on its technical know-how and broad product offering.

Mr. McAndrews says that while much of Du Pont's current automotive business is in North America, the company also plays a major role in supplying markets in Europe, Latin America and the Asia Pacific area.

In Asia, he says the company is in the process of expanding operations to better serve automotive customers there. For example, in Japan, he says the company supplies engineering polymers and "Vespel" polyimide parts from its facilities at Utsunomiya and

Continued on Page 26

Celanese Cuts Capacity For Polyester Staple in N.C.

Celanese Fibers will reduce production capacity for polyester textile staple at its Salisbury, N.C., plant by 185 million pounds over the next 18 months.

This capacity reduction at Salisbury, in addition to previously announced industry reductions, will bring capacity more into balance with expected demand. This move will have no significant effect on income.

The permanent shutdown of older production equipment will require the elimination of 150 to 200 jobs.

PPG, Nippon Oil Agree To Study Joint Projects

PPG Industries, Inc. and Nippon Oil & Fats Company have agreed to study joint development of several specialty chemicals projects in Japan.

Under initial consideration are programs involving chloroformates, acid chlorides, flame retardant resins and non-opthalmic fabricated products based on PPG's "CR-39" optical quality monomer, according to Robert D. Duncan, vice-president of the company's chemicals group, which is working directly with NOF on the project.

Mr. Duncan says the companies have "complementary and synergistic" technological strengths and that the projects under consideration would support both companies" diversification efforts into value-added chemical products.

"We expect that establishment of a joint venture with NOF could lead to annual sales of $75 million within five years," Mr. Duncan says.

Chloroformates and acid chlorides, used primarily for pharmaceutical and agricultural chemical synthesis, would be produced at PPG's joint venture plant with Asahi Glass Company at Chiba, Japan. The Asahi-Penn Chemical Company plant, in operation since 1967, currently produces chlorine derivatives and "CR-39" monomer.

Market development has been underway in Japan for about two years on new resin compounds that could provide much higher levels of flame retardance than existing products, PPG says. The companies may eventually produce the products in Japan, PPG adds.

PVC Producers Seek to Raise June Prices to Repair Inroads Made in the US Market Earlier

Polyvinyl chloride resin producers, squeezed for supplies of raw material vinyl chloride monomer, have implemented 2-cent-per-pound resin price increases at the beginning of June, thereby attempting to regain price levels that had eroded in May.

B.F. Goodrich Company, the nation's largest PVC resin producer has established a June 1 price schedule of 30 cents per pound for pipe grade PVC resin; 31 cents per pound for general purpose homopolymer; 32 cents per pound for "special purpose" and wire and cable grade resin, and 33 cents per pound for film grade resin. A company spokesman says the action "restores prices" to April levels before a May slide in selling values.

Vinyl chloride is traditionally tight at this time of year, but operational problems experienced by two integrated VCM-PVC producers in May has caused dislocations in the market, sources say. B.F. Goodrich had to close its La Porte VCM plant, rated at 1 billion pounds per year, for five to six days last month, and also ran into problems at its Calvert City, Ky., plant, one VCM source says. Formosa, also an integrated producer has lost several days of production at its 420-million-pound Baton Rouge, La. VCM plant, the source adds.

Both Goodrich and Formosa have attempted to buy VCM in the open market, sources say, but were largely unsuccessful, because most excess material had been committed to the export market. As a result, one analyst says Goodrich has been forced to cut production of PVC and dip heavily into its supply of inventories.

A VCM maker calls the situation a "temporary dislocation." He says that if a company wanted to contract large quantities of VCM, his needs could be met, but large spot orders are impossible to meet because export demand is strong and VCM producers, failing to

Continued on Page 29

TSCA Reports Mandated by EPA In a Final Ruling

Environmental Protection Agency last week issued a final rule requiring chemical manufacturers and importers to report current production and plant-site information on thousands of commercial chemicals.

The new rule, mandated by the Toxic Substances Control Act, requires companies to report to EPA this year and again every four years.

EPA says the information will be used for preliminary assessment of risk to human health and the environment.

"The data for many chemicals in the existing inventory are becoming increasingly obsolete, and we need updated, readily available production volume and plant-site data," says Dr. John Moore, assistant administrator for pesticides and toxic substances.

"This kind of information gives us a preliminary indication of a chemical's potential for human and environmental exposure and will help us target our regulatory efforts," he adds.

The rule requires the first substantial update of production and plant-site data for chemicals listed on EPA's chemical substances inventory. The original inventory was developed under TSCA and required the reporting of 1977 production information.

EPA will collect the latest information on chemicals in the current inventory on a plant-by-plant basis, including each chemical's identity, whether the firm is a manufacturer or importer, the site of the plant where it is manufactured or imported, whether use of the substance is limited to the site where it is manufactured, how much is produced, the plant's technical contact person and whether any of the information is confidential.

TSCA gives companies the right to claim inventory data as confidential when absolutely necessary, but confidentiality claims must be asserted and supported when they submit the data to EPA.

"EPA strongly encourages firms to limit confidentiality claims as much as possible.

Dye Decision Avoided Yet Again

Food & Drug Administration last week postponed a decision, for the 30th time in 23 years, on whether to ban five widely used food and drug dyes, four of which have been shown to cause cancer in laboratory animals.

The postponement means the color additives will remain on the market until FDA makes a final decision.

Agency spokesman James Greene says the delay will permit FDA to conduct further scientific review of the dyes, but consumer groups and some congressional critics believe the postponement is a result of industry pressure.

"The agency is just trying to figure out how they can rationalize the fact that they're breaking the law by allowing cancer-causing chemicals in food, drugs and cosmetics," says Dr. Sidney Wolfe, director of Public Citizen's Health Research Group.

FDA believes the dyes are harmless and agrees with industry that the substances can cause cancer only if they are consumed in massive quantities. "The continued provisional use of these additives presents no hazard to the public health," says Mr. Greene.

FDA was required by the Food, Drug and Cosmetic Act to evaluate the safety of all color additives by January 1963. A congressional report sharply criticized the agency last year for its inaction.

"This is an ongoing embarrassment to the whole regulatory process," said Rep. Ted Weiss (D-NY), chairman of the House panel that prepared the report. He accused the agency of being too concerned with the interests of industry.

Chemical Marketing Reporter

Volume 229 June 9, 1986 No 23

Founded October 18, 1871, by William O. Allison
Directed 1900-1942 by Harry J. Schnell
Schnell Publishing Company, Inc.
100 Church Street, New York, N.Y. 10007-2694
(212) 732-9820. Telex Number: 226113 CMR UR.
Cable Address: Reporter, New York

SCHNELL

CHEMICAL MARKETING REPORTER ISSN-0090-0907 Vol. 229, No. 23, June 9, 1986. Published weekly on Monday by Schnell Publishing Company, Inc., 100 Church Street, New York, N.Y. 10007-2694, U.S.A. Second-class postage paid at New York, N.Y. Single copy price: $2.25. Subscription prices: Domestic United States, $65 a year; Europe (airspeeded), $185 a year; Japan (airspeeded), $220 a year; Canada and the rest of the world, $95 a year. Subscriptions to other than North American destinations are payable with the order in U.S. funds. Subscription includes the Chemical Buyers Directory, published each October.

ISSN 0090-0907/84 $0.75 + $0.25

Ciba-Geigy to Cut Toms River Workforce In Restructuring Move

Ciba-Geigy Corporation said last week that it will phase out the synthesis of resins and dyestuffs at its Toms River, N.J., plant over the next several years, while continuing the formulation of dyestuffs, there.

The company plans to transfer resin synthesis to its McIntosh, Ala., plant. A review of alternative sites for the future synthesis of dyestuffs is in progress, according to the company.

Ciba-Geigy also said it plans to build a new $90 million pharmaceutical facility at Toms River which will manufacture active ingredients for medications used to treat hypertension, depression and arthritis.

Approximately 900 workers are currently employed at Toms River. It is estimated that about 325 will be employed there several years from now, when the restructuring and pharmaceutical unit are completed.

Phasing out synthesis of industrial chemicals at Toms River will "result in a significant reduction of our production-generated waste and thus is compatible with the residential and recreational nature of the surrounding area," Richard Barth, Ciba-Geigy's president and chief executive officer, commented last week.

In announcing these developments, the company also reaffirmed its previous commitment to invest in upgrading the environmental protection operations at the plant. These include the $25 million investment for the extensive wastewater treatment plant upgrade and the toxicity reduction program.

Auto Plastic Uses by Japanese in the US Seen Having Major Impact on the Industry

The 2 million passenger cars and light trucks which could be manufactured annually by Japanese and Korean companies in North America by the early 90's will concentrate purchasing power for almost 400 million pounds of plastic resin and 140 million pounds of elastomer within a new group of participants, accordng to a study by Phillip Townsend Associates, Marblehead, Mass.

The recent decline of the dollar has affected imports and encouraged auto OEM's and Japanese suppliers to increase their commitments to North American manufacturing facilities concentrated around new manufacturing hubs in Kentucky, Ohio, Tennessee, Illinois and southern Canada.

"A high degree of loyalty characterizes the auto OEM/supplier relationship in Japan," according to Robert Ellor a Townsend Associate analyst. It is probable that Japanese auto OEM's will prefer working with suppliers with the same cultural traditions with whom they have done business for decades.

"This preference creates a circle of events which result in investment by Japanese auto part suppliers and resin companies in North America."

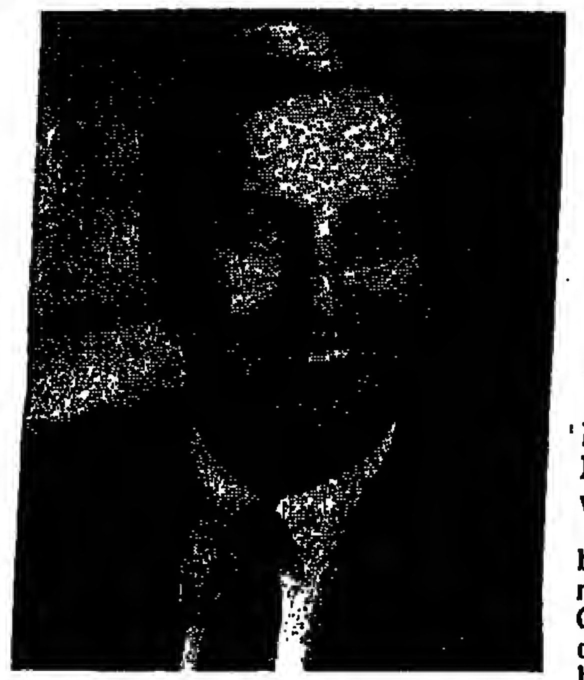
The pressure exerted by Japanese auto companies on their parts and materials suppliers strongly encourages investment in North American facilities. In effect, the auto OEM says that if you wish to supply in Japan and Taiwan you must supply in North America as well, Townsend Associates says.

The Japanese auto suppliers are likely to introduce new materials technologies (especially for polypropylene compounds) and cause a "ripple effect" should they decide to enter non-automotive markets.

"Native" North American auto parts suppliers who successfully participate in the supply circle will be better positioned to serve evolving global auto parts markets, according to the study.

Japanese elastomeric parts fabricators are also establishing manufacturing operations in North America.

William J. Cribbin, who has been named president of Devon Chemicals Inc., a joint venture between BP Chemicals Americas Inc. and Ashland Chemical Company. Mr. Cribbin was formerly with Union Carbide.



Richard J. Sutch, who has been named president of OxyTech Systems, a newly formed 50-50 joint venture of Occidental Chemical Corporation and Eltech Systems Corporation.

Polysar Gets Approval For New Latex Venture With Chinese Company

The Chinese government has approved an agreement between Shanghai Gao Qiao Petrochemical Corporation and Polysar Ltd. of Sarnia, Ontario, Canada, to form a joint venture petrochemical company.

Polysar says this represents the first such agreement for a Canadian petrochemical company. Formal approval was granted by the Chinese Ministry of Foreign Economic Relations & Trade. The 50-50 joint venture, to be known as Shanghai Gao Qiao—Polysar Company Ltd., will use Polysar technology in a program to significantly increase production capacity of synthetic rubber latexes in the People's Republic of China.

The initial phase will use Polysar technology to triple the capacity of Gao Qiao's existing 1,000-metric-ton latex plant in Shanghai, Phase two involves the construction of a new 10,000-ton latex plant using Polysar technology and the marketing of its output by the joint venture. The third phase will examine other opportunities for Polysar's involvement in the Chinese latex industry, the Canadian firm says.

Contracts for phase 1 have been signed and the upgraded capacity is expected to be available for the Chinese market by early 1987, Polysar says.

Biotechnology Company Has Microalgae Source For a Higher Fatty Acid

Cyanotech Corporation, Woodinville, Wash.-based specialty producer of high-value products from microalgae, says it has successfully developed an algal source for eicosapentaenoic acid (EPA) which would make purification of the acid far simpler.

EPA, a C_{20} polyunsaturated fatty acid with five double bonds that is found in certain fish oils, is believed to be effective in reducing risk of heart disease and in preventing or even reversing, formation of atherosclerotic plaques in the arteries.

Several fish oil products containing EPA are currently available in the marketplace and some estimates put a value on retail sales of EPA as high as $25 million annually.

However, fish oils containing EPA also contain other fatty acids with closely similar chemical structures, complicating the separation and purification. According to Cyanotech, its algal source contains no closely related fatty acids, meaning EPA purification would be much easier.

Also, the company says its microalgal EPA product is essentially free of cholesterol

Continued on Page 17

Biotechnology Reform Bill, Sponsored by House Chairman, Is Criticized by Industry Group

Before taking action on proposed legislation designed to bring major reforms to biotechnology, Congress should wait to assess the effectiveness of new regulatory procedures devised by the White House, an industry spokesman said last week.

"The Industrial Biotechnology Association believes no new legislative initiatives are needed." IBA executive director Richard D. Godown told two House Science & Technology subcommittees at the first congressional hearing since 1978 on legislation to regulate the biotechnology industry.

Rep. Don Fuqua (D-Fla.), chairman of the House Science & Technology Committee, is sponsoring a bill that would require Environmental Protection Agency or Department of Agriculture to grant approval before genetically engineered organisms could be released into the environment, used in manufacturing, or distributed in commerce.

It would also establish statutory authority for the existing Biotechnology Science Coordinating Committee to promote uniform procedures for evaluating risks, to recommend research priorities, and to develop guidelines governing laboratory and manufacturing practices.

A research program supported jointly by government and industry would be set up to fund basic biological research relevant to biotechnology research.

Similar legislation has been introduced in the Senate by Sen. Dave Durenberger (R-Minn.), chairman of the Environment & Public Works subcommittee on toxic substances.

Mr. Godown said a motivating force behind Rep. Fuqua's legislation "seems to be a desire to regulate the technology itself,

Continued on Page 43

LAB Expansion Slated

Monsanto Chemical Company plans to expand capacity, improve the quality and undertake a research program for its linear alkylbenzene (LAB) business. The three-part investment program will focus on MCC's LAB facility at Alvin, Tex. The program's first phase, which is now in the definitive engineering and design stages, will be a 50-million-pound-per-year expansion of the LAB unit. "We believe the additional 50 million pounds will serve the US and Canadian markets well into the 1990s," says Roger F. Sellew, commercial director for detergents.

"A second element of our investment plan will be to implement a major quality improvement program. This improvement project will ensure the production of the highest quality LAB available in the industry and is designed to better meet and ultimately exceed our customers' demands for a quality LAB," Mr. Sellew says.

Board of directors approval for the expansion and quality improvement projects will be requested in the near future. The projects have targeted start-up dates in early 1989.

The third phase of the program will focus its detergent research on the development of technology to produce highly soluble LAB specifically for the rapidly growing liquid detergent market.

"Our efforts are currently in the experimental stages, and we are confident that our research will lead to the commercialization of LAB providing greater flexibility to the detergent manufacturers," Mr. Sellew says.

Investment plans for the LAB facility follow Monsanto's acquisition of Witco Corporation's Carson, Calif., plant last year. The Carson plant has a yearly capacity of 50 million pounds for LAB. It also produces 25 million pounds annually of branched and specialty alkylate for the agricultural emulsifier and oil additives markets.

Chemicals Banned For Export to Syria; War Use Is Feared

The US banned the sale of eight chemicals to Syria last week, citing fears that Syrian built chemical weapons will be given to Iran and escalate the protracted war in the Persian Gulf.

The embargo, which is identical to one imposed two years ago on Iran and Iraq, was extended to Syria after US intelligence discovered that country had the capability to make chemical weapons. Syria has been supporting Iran in the seven-year conflict.

The eight chemicals on the embargo list are potassium flouride, dimethyl methylphosphonate, methyl phosphonyl diflouride, thiodiglycol, phosphorus oxychloride, dimethylamine hydrochloride, and chloroethanol.

The chemicals have widespread commercial applications in US industry, but in certain combinations and strengths can make potent weapons.

A State Department official said that while the embargo was being considered, the Commerce Department determined that no American companies were currently selling the eight chemicals on the list to Syria. The embargo, he said, would guard against future sales and might also influence other countries to halt exports of the chemicals to Syria.

The ban on chemical exports directly to Iran and Iraq was imposed two years after government officials intercepted a large shipment of chemicals heading from the US to the Persian Gulf reigon.

The State Department spokesman said Iran has not used chemical weapons, "but their continued use by Iraq and the potential for Iranian use is a cause for concern."

In a related development, President Reagan said Thursday the Administration is ready to intensify negotiations for a global ban on chemical weapons at the Geneva talks that have been unable to make progress on the issue since 1968.

The President met with his representative to the talks, Ambassador Donald S. Lowitz, before the ambassador departed for the 1986 round of the discussions at the 40-nation conference on disarmament in Geneva, Switz, which opens today (June 9).

ICI and Enka to Swap Polyester and Polyamide To Rationalize Positions

Imperial Chemical Industries PLC of the UK and Enka, the Dutch fiber maker, have agreed to swap their respective market positions in polyester staple and polyamide filament yarn.

ICI will progressively withdraw from the production of polyester staple fibers at its Wilton, Teesside, plant in favor of increased output there of "Melinar" polyethylene terephthalate (PET) packaging material.

During ICI's phased withdrawal from the polyester staple fiber business over the next two to three years, output of the material from its Wilton plant will be marketed by Enka, which has a strong position in the business.

Meanwhile, ICI will market polyamide textile flat yarns manufactured at Enka's Emmen plant in the Netherlands until production of the yarns is completely phased out by the end of the decade.

Enka earlier decided that it would not modernize the Emmen plant because its market share in polyamide yarns is "rather feeble."

The agreement with ICI will allow Enka to gradually eliminate the plant's workforce through attrition, avoiding major union problems that would come with forced layoffs. Production there will be phased out in tandem with employment until 1989 or 1990, when the plant is expected to be closed completely.

Production of polyamide carpet yarn at Emmen will not be affected.

FDA Approves Alpha-Interferon Products Of Schering-Plough, Hoffmann-La Roche

Food & Drug Administration last week approved the commercial use of human alpha interferon produced separately by Schering-Plough Corporation and Hoffmann-La Roche Inc. for the treatment of hairy cell leukemia.

Alpha interferon is the first product of biotechnology to be approved in the US for the treatment of cancer. It has already been commercialized abroad.

"While the approved indication — hairy cell leukemia — is relatively rare, this approval confirms our long-held belief, supported by research and clinical findings, that alpha-2 interferon is an effective form of therapy with an important role to play in modern medicine," Robert P. Luciano, chairman and chief executive officer of Schering-Plough, said last week.

Applications are pending in the US for the use of alpha interferon in the treatment of other cancers, including malignant melanoma, and for the prevention of the common cold.

By 1990, it is estimated that worldwide sales of alpha interferon could reach $350 million.

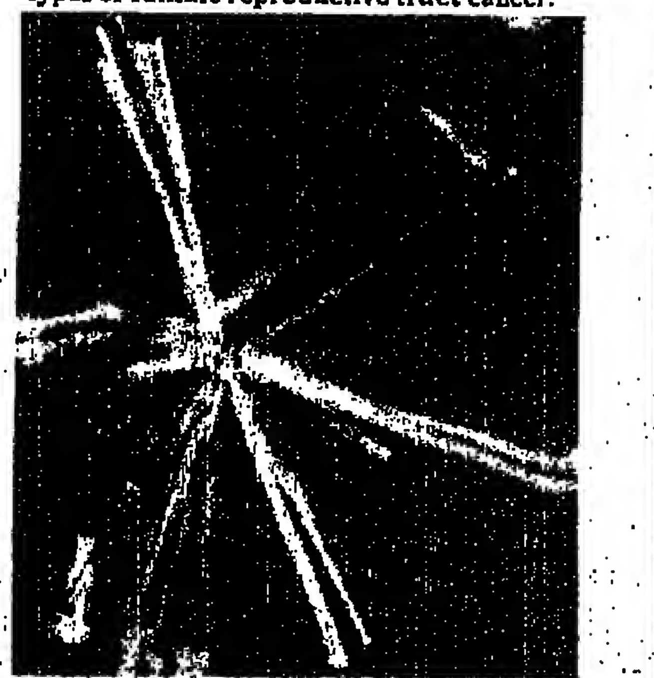
Schering-Plough acquired exclusive marketing rights to alpha interferon in 1979 from Biogen NV, which holds both US and European patents to the drug. Schering-Plough will market alpha interferon under the trade name "Intron" A.

Roche developed its product in collaboration with Genentech Inc., and will market the drug under the name "Roferon"-A.

Roche and Schering-Plough avoided a potentially long and costly legal battle that could have retarded commercial development of interferon when they agreed last year not to contest each other's patent rights to the product in the US and Europe (CMR 5/20/85, pg. 3).

Interferon enhances the body's immune system through activation of natural killer cells and increased expression of tumor antigens.

Separately, scientists at Biogen and Massachusetts General Hospital have produced a human protein through genetic engineering techniques that will be tried against several types of female reproductive tract cancer.



ALPHA-2 INTERFERON CRYSTAL. Photomicrograph of Biogen/Schering-Plough recombinant interferon alfa-2b manufactured by means of recombinant DNA technology.



Worley H. Clark, Jr. | Robert C. Forney | Harold A. Sorgenti

CMA INSTALLS NEW SLATE: Chemical Manufacturers Association at its annual meeting in White Sulphur Springs, W. Va. has elected Worley H. Clark, Jr. chairman of the board and Robert C. Forney vice-chairman of the organization. Mr. Clark, chairman of the board and chief executive officer of Nalco Chemical Company, succeeds George J. Sella, chairman of the board, president and chief executive officer of American Cyanamid Company. Mr. Forney, executive vice-president of E.I. du Pont de Nemours & Co., replaces Harold A. Sorgenti, president of Arco Chemical Company, who was elected chairman of the CMA executive committee.

Orthoxylene Recovery Seen Lasting Through '88, Maybe '90; Overcapacity Persists, However

Following six years of 7 percent annual decline in production, the orthoxylene market last year began what one industry observer terms a "mini-recovery" which is expected to continue at least through 1988 and possibly through 1990.

Whereas production of the isomer totaled 1.08 billion pounds in 1979, a dramatic drop in exports, increased imports and greatly reduced demand for phthalic anhydride brought about a decline in orthoxylene production to 696.5 million pounds in 1984.

Last year, output rose to 698.1 million pounds. An observer estimates in 1986 the total will be about 700 million pounds. For the coming years, 1.5 percent growth is forecast through 1988 and possibly the rest of the decade. At such a rate, output in 1990 would total 743 million pounds, the industry's highest since 1983 when 773.4 million pounds of product were produced.

Despite relatively recent plant closures, capacity utilization would average a modest 77 percent this year should output total the 700 million pounds forecast.

When Shell Chemical Company exited the business in late 1984, it removed 125 million pounds of annual production capability from the market, while the departure of E.I. du Pont de Nemours & Co., Inc. last Fall reduced industry capacity another 25 million pounds. At present, industry capacity totals 905 million pounds per year.

To cope with the overcapacity, producers periodically cease production according to market conditions and restart when demand dictates. It is significantly less costly to shut down and bring back up an orthoxylene unit over the course of a few weeks than it would be to do so with other types of units.

Also, when the orthoxylene market is glutted and prices are weak, as has often been the case the past few years, producers with the equipment to do so isomerize orthoxylene to paraxylene to capitalize on a healthy paraxylene market.

Most of the loss of business which has created the overcapacity is blamed on the dras

Continued on Page 13

Sulfite Labeling Standards Are Urged by Food Scientists

The vast majority of the US population enjoys the benefits sulfites contribute to the food supply without risk, but proposed labeling standards should be adopted to protect some highly-sensitive asthmatics, who may suffer potentially fatal allergic reactions if exposed to these chemical preservatives, food scientists said last week. Six sulfiting agents — sulfur dioxide, sodium and potassium metabisulfite, sodium and potassium bisulfite, and sodium sulfite — have been widely used in foods for generations.

Robert P. Dames, who has been named to the new post of vice-president of marketing at Emery Chemicals. He was most recently director of the oleochemicals group.

However, their use has come under fire recently for causing allergic reactions, including as many as 19 possible fatalities, so strengthened regulation has been called for.

"Labeling appears to be the best regulatory approach," according to a scientific status summary report released by a food safety and nutrition panel of the Institute of Food Technologists, an organization representing some 22,000 food scientists.

Food & Drug Administration last year proposed two regulations to deal with sulfites. One would ban the use of sulfites on fresh fruits and vegetables; the other would require warning labels on foods containing more than 10 parts per million of sulfite.

The report, prepared by Dr. Steve L. Taylor and Dr. Robert K. Bush of the University of Wisconsin, at the direction of the IFT panel, is intended to offer guidance to FDA and other agencies on how the use of sulfites should be regulated.

The researchers concluded that sulfites can cause adverse reactions in about 20 percent of steroid-dependent asthmatics, equating to about 180,000 persons nationwide. Based on earlier research, FDA has estimated that between 500,000 and one million people may run the risk of sulfite reaction.

The IFT scientists noted that while further tests are needed to determine what types of sulfites and sulfited foods trigger reactions,

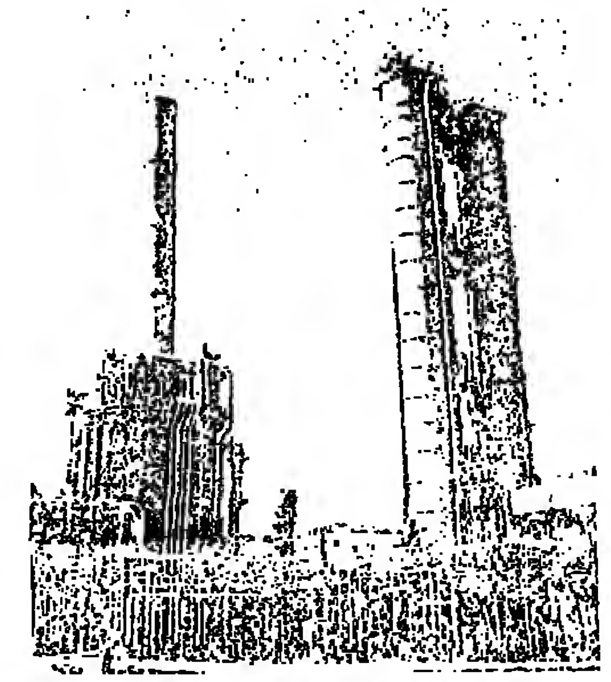
Continued on Page 24

Polypropylene Royalties Paid to Phillips Petroleum

Thirteen Japanese companies have agreed to pay patent royalties to Phillips Petroleum Company for their polypropylene which is contained in resin and fabricated products (e.g., for autos, appliances) exported from Japan to the United States.

Phillips holds the U.S. composition of matter patent on crystalline polypropylene granted in March 1983. Phillips also holds two U.S. patents, granted in 1976 and 1977, directed to propylene block copolymers, generally referred to as impact polypropylene. All three patents are the subject of the license agreements.

The royalty payments are based on a rate of 1 cent per pound, adjusted for inflation. Annual imports of polypropylene from the companies, collectively, are estimated at 110 million pounds (50,000 tons).



ORTHOXYLENE FRACILITY: Closing of a number of orthoxylene plants has reduced capacity in the US to 905 million pounds per year. This was once a Shell Chemical facility. Shell exited the business in late 1984.

Alcoa Closing Down Its Vancouver Smelter

Aluminum Company of America has permanently closed its Vancouver, British Columbia, aluminum smelter, laying off 450 striking production workers there. The plant had an annual capacity of 115,000 metric tons.

Alcoa's wholly-owned capacity, most of which is in the US, now stands at 1.1 million tons, compared to over 1.4 million tons prior to a company restructuring program.

Alcoa said the Vancouver closure would be accounted for as part of a $175 million charge in the fourth quarter of 1985 relating to the restructuring.

Last month, Alcoa offered to spin off the Vancouver plant as a separate entity if workers there would agree to a reduced wage scale.

Alcoa closed the plant after the Vancouver workers joined other union locals in a vote to go out on strike against the company following the expiration of labor contracts on May 31.

According to an Alcoa spokesman, the company told the Vancouver workers that their vote was "tantamount to a shutdown" and offered a 60-day extension of the previous contract to allow time for negotiating a separate contract.

Olin Agrees to $15 MM Compensation Fund To Settle Litigation Over DDT Exposure

Olin Corporation has agreed to establish a $15 million compensation fund to settle claims of plaintiffs in Northern Alabama, who say they were injured by discharges of DDT pesticide from Olin's former manufacturing plant at the Redstone Arsenal in Alabama.

The settlement is subject to the approval of Federal District Court Judge U.W. Clemon. Hearings on the proposed class-action settlement are scheduled to be held in the early Fall.

Olin said last week that while there is no evidence that DDT discharged from the Redstone Arsenal plant injured anyone, the comany wanted to "put the costs and disruption of the DDT litigation behind it."

Under the terms of the proposed settlement, the court will appoint an administrator to establish procedures for making claims and determining compensation for personal injury, property damage or loss of income.

Members of the class will consist of plaintiffs in the litigation and current and former residents of six counties in Northern Alabama.

Since 1983, approximately 9,700 plaintiffs have filed suits against Olin, alleging personal injury and property damage. Olin says the court previously dismissed many of these claims on various grounds, including the fact that they exceeded the statute of limitation. Olin says the court also dismissed various claim theories, including intentional infliction of emotional distress, outrage, assault, battery and trespass.

Olin agreed in 1982 to clean up the DDT residue near the former Alabama plant, which was closed in 1971. Olin says the cleanup is under way and is expected to be completed by early 1988.

Dioxin 'Dangerous' at Oxy Site

Unsafe levels of highly toxic dioxin have been discovered at an Occidental Chemical Corporation site in Niagara Falls, NY, Environmental Protection Agency said last week.

However, the agency said the plant site poses "no imminent or substantial danger to the public health" because it is not accessible to the public.

James R. Marshall, an EPA spokesman, said direct human exposure to the chemical was "extremely unlikely" because it is buried below the ground and covered with asphalt.

Occidental Chemical's Hooker operation manufactured pesticides at the Niagara Falls site from 1949 to 1972. A company spokesman says the facility was shut down and dismantled shortly after production stopped and disposed of in a "secure landfill."

EPA found concentrations of dioxin of one part per billion on the surface at the site, and as high as 18,600 parts per billion underground. The Federal Centers for Disease Control says dioxin concentrations of one part per billion threaten health if there is direct and frequent exposure.

New York State environmental officials says the chemical will have to be removed to avoid offsite migration, including possible contamination of the Niagara River.

EPA said the levels of dioxin detected at the Occidental plant site exceed the concentrations found in soil samples taken from Love Canal and three other area sites.

Karl A. Stewart, who has been elected secretary of Tenneco Inc. Mr. Stewart joined Tenneco in 1977, after service with Securities & Exchange Commission.

Degussa's Sales Decline Reflects Prices

Degussa, Frankfurt am Main, a diversified German metals concern, had sales of $2.29 billion in the fiscal year ended March 31, 1986, a decline of about 9 percent from the previous year's revenues.

Unit sales remained high, Degussa said, but the volume in Deutsche marks was reduced by falling prices of gold and silver, together with the weakening of the dollar. Some 68 percent of the company's turnover was accounted for by foreign business, as compared with 71 percent the previous year.

Degussa AG, the parent company, had 1985-1986 sales of $1.94 billion, down 7 percent from the previous year. Disregárdlng precious metals, revenues were up 1 percent from a year ago.

In the metals sector, a lower volume of foreign trade and a downturn in precious metals prices led to a decrease of 12 percent in total revenues. In chemicals, an increase of sales of about 2 percent would have been larger were it not for price decreases, which reflected lower prices of raw material, plus the lower value of the dollar in overseas markets.

Degussa's pharmaceuticals sector achieved a slight increase in revenues in the first half of the year, when lower sales abroad were compensated by higher domestic sales.

Among the company's larger subsidiaries, Asta-Werke AG, Bielefeld, and Degussa Antwerpen NV, of Belgium, recorded particularly good results, the company said.

In the US, Degussa Corporation had improved results after a poor showing the previous year, but in Brazil, the currency reform had a negative impact on the results of Degussa SA.

Accruals of fixed assets at Degussa AG totaled about $48 million during the year, in line with a scheduled increase over the previous year's $44 million.

Degussa noted that it has reached agreement with Phillips Petroleum Company on the acquisition of Phillips carbon black plants. In the metals sector, Degussa expects that its position in the US will be strengthened by the acquisition of Metz Metallurgical Corporation, South Plainfield, N.J.

Meanwhile, control of Chemische Fabrik Grunau GmbH, of Illertissen, West Germany, passed to Henkel KGaA, Dusseldorf, as of January 1.

Publicker's Sales Strong In Carbon Dioxide Area Following Restructuring

Publicker Industries Inc., Greenwich, Conn., says that its carbon dioxide business continued strong into the first period of 1986, as sales volume increased 6 percent and operating profit rose approximately 7 percent from levels of the first period a year ago.

Publicker's total sales in the first quarter declined to $4,106,000 from $13,112,000 a year ago, as a result of the shutdown during 1985 of operations related to industrial ethanol, fuel-grade alcohol, automotive products household cleaning products, bulk liquid storage and the company's contract packaging business.

In March, Publicker sold its idle facility for industrial alcohol in Philadelphia for $3 million and used the proceeds to retire secured debt under its domestic term loan agreement.

Publicker said that it is now actively pursuing the potential sale of its remaining idle facilities and seeking a purchaser for the UK beverage division. Publicker anticipates that the sale of these facilities will generate substantial additional working capital for use in the company's acquisition program.

Publicker's results in the first period show a net loss of $745,000, as compared with a loss of $1,256,000 in the same period a year ago. The loss included $375,000 in a management contract settlement and $552,000 for closure of the contract packaging division.

Perstorp of Sweden Boosts Sales 12 Percent in 8 Months

Perstorp AB, the big diversified producer of chemicals and biotechnology products based in Sweden, raised its international sales 12 percent in the fiscal eight months ended April 30 to the equivalent of $365 million from $321 million a year ago. Both numbers have been converted at the present exchange rate on the Swedish kroner. In November, Perstorp added to its extensive product line the business of La Bakelite SA, in France, one of the largest manufacturers of resins and phenolic molding compounds in Europe.

The French company is expected to add upward of $35 million annually to Perstorp's consolidated revenues. Business trends for the acquired unit have been favorable, Perstorp stated.

Bifok AB, which is a part of Perstorp Biotec (a biotechnology operation), recently acquired two companies — Servomed AB and Servochem AB, both of Stockholm, as well as a new subsidiary in the US, Servomed Inc.

The activities of the two Swedish companies are concentrated in analytical instruments for distillation, including brewery operations, and for use in health care and other medical outlets. The acquisitions strengthen Perstorp's participation in the food and animal feed industries, the company noted.

Two new licensing agreements for the production of formalin (37 percent solution of formaldehyde) have been signed with customers in West Germany, and a license for the production of industrial grade laminate has been sold to a company based in India.

In another transaction, Perstorp Chemitec has acquired Gunfred-Gruppen AB's business activities in the field of seamless flooring and wall partitions, strengthening Perstorp's activities in the field of plastic and composite building materials.

Also, Pernovo Incorporated in the US acquired 67 percent of the shares of Guided Wave, Inc. in Sacramento, Calif., a company that works with sophisticated analytical techniques for instruments and process control.

Perstorp's operating income in the first eight months increased to $43.5 million from $39.8 million in the same period a year ago. Income after net depreciation and financial items amounted to $33 million, up from $30 million a year ago, while income before allocations and taxes totaled $31.4 million, up from $30.1 million.

Michael J. Mudler, who has been appointed vice-president of finance for the vinyl division of B.F. Goodrich Company.

Diamond Shamrock Sells Stake in UK Subsidiary

Diamond Shamrock Corporation has sold its 75 percent interest in Lankro Chemicals Ltd., a UK maker of specialty chemicals, to Lankro management for an undisclosed sum.

The remaining 25 percent interest had been distributed or put in trust for Lankro employees in 1983.

Lankro, based in Eccles, with plants in the UK, Belgium and West Germany, makes polymer additives, polyurethanes, surfactants and radiation curing chemicals. Sales last year were approximately $100 million.

IMC Write-Offs Will Produce Loss Of $4-$6 Per Share

International Minerals & Chemicals Corporation is estimating that its final results for fiscal 1986, after write-offs, dispositions and adjustments, will be a net loss in the range of $4.30 to $6 per share.

IMC's earnings from operations before any of the special charges are now estimated to be slightly below the previous forecast of 50 cents per common share.

To boost earnings in the next fiscal year, IMC is preparing plans for commercialization of porcine growth products developed through biotechnology, George D. Kennedy, president and chief executive officer of IMC, said.

In the near future, Mr. Kennedy added, there are likely to be two other new product introductions that will add to the growth of the animal products group.

The acquisition earlier this year of Mallinckrodt Inc. from Avon Products Corporation was cited by Mr. Kennedy as a major step in the company's long-term strategic plan for diversified growth. Mallinckrodt produces fine chemicals and intermediates for pharmaceuticals and personal-care products.

In the fourth quarter of the present fiscal year, IMC is continuing to review several of its under-performing assets for possible write-down or write-off, and may also sell, or reach a decision to sell certain assets, including its gas and oil unit and all or part of its industrial products segment.

IMC also expects to complete the previously announced charge to earnings for the purchase price premium allocated to Mallinckrodt's inventories.

Chesebrough-Pond's Puts Hospital Unit on Block

Chesebrough-Pond's, Inc. is offering to sell its Hospital products division and will use the proceeds to strengthen its basic businesses in consumer products and chemicals, said Ralph E. Ward, chairman of the company and chief executive officer.

Shearson, Lehman Brothers, Inc., New York, is acting as financial advisor for the transaction. A year ago, Chesebrough, a diversified producer, of cosmetics, toiletries, foods, shoes and textiles, made a major diversification by acquiring Stauffer Chemical Company, of Westport, Conn.

T.R. Larsen, vice-president of manufacturing, who joined Chesebrough in 1970 and has served as head of manufacturing for the hospital products division since 1974, has been named president and general manager of the division, succeeding Robert E. Karlson, who is taking a medical leave of absence.

The division to be sold had sales of $84.5 million last year and will tally its revenues in the $100 million range in 1986, Mr. Ward said.

The division's sales growth has exceeded 16 percent per year compounded over the last five years.

Chemical Financial Briefs

DuPont Ventures Incorporated, McLean, Va., has acquired for an undisclosed amount of stock and cash a controlling interest in Synergistic Technologies Inc., a privately held company headquartered in Richmond, Va., which develops and applies technology for the surface modification of metals,

Amoco Corporation and Analog Devices, Inc. have filed an SEC registration statement for the sale of Amoco's 16 percent interest in Analog's common stock. The move is in line with Amoco's policy to concentrate on its core businesses, says Richard M. Morrow, chairman.

Revlon Group, Inc., has agreed to sell Technicon Corporation to a consortium of investors, including Cooper Development Company, for $250 million in cash, subject to adjustments, and $50 million principal amount of preferred stock.

Forest Laboratories, Inc. has contracted with Key Pharmaceuticals, Inc, to acquire rights to the latter's "Aerobid" metered aerosol corticosteroid used in the treatment of asthma. Introduced in december 1984, the product is currently selling at the annual rate of $2.4 million. The agreement is subject to consummation of the pending Schering-Plough/Key merger.

Kidder, Peabody & Co., as sole manager of the underwriting group, is offering to the public $125 million of Tyco Laboratories Inc. 6.75 percent convertible subordinated debentures due May 15, 2006.

Enzon and Cyanamid Set A Joint Veterinary Project

Enzon, Inc., South Plainfield, N.J., and American Cyanamid Company, Wayne, N.J., have reached an agreement in principle to develop and market specific veterinary products.

The two companies said they have completed successful first-round testing of a biologically active polypeptide derivative utilizing Enzon's "PEG" process.

This Enzon technology is said to provide protection to the usually fragile polypeptides against normal physiological degradation processes, thus extending their circulating life in the blood and providing long-term biological activity.

Enzon and Cyanamid said they intend to extend the use of Enzon's technology initially to a broad range of veterinary pharmaceuticals.

Enzon, Inc. is a pharmaceutical company specializing in enzyme therapy to treat a wide range of life-threatening diseases, offering specialized enzymes for therapeutics, research and industrial applications.

American Cyanamid produces chemicals, pharmaceuticals, biotechnology products and personal-care products.

OILS, FATS & WAXES

Reichhold and Union Camp Follow TOFA Price Reduction

Reichhold Chemicals, Inc. and Union Camp Corporation last week cut their prices on tall oil fatty acids (TOFA), following other producers who had made changes the previous week. The lower pricing is attributed principally to competition from fatty acids based on vegetable oils and tallow.

Reichhold says it is decreasing its TOFA pricing by 3 cents to 4 cents per pound, effective June 1. Representative changes are "Aconew 500" which drops from 29 cents to 26 cents per pound, and "Acofor" which falls from 27½ cents to 23⅛ cents per pound. On the other hand, Reichhold says it is increasing prices on its rosin size products by 10 percent, effective June 1.

Union Camp says it is reducing its TOFA pricing by 5 cents per pound, effective June 2. A sample change is "Unitol ACD-SP" which drops from 32 cents to 27 cents per pound.

In addition, Union Camp says it is cutting its distilled tall oil (DTO) pricing by 2 cents per pound, and a sample change is "Unitol DT-40" which falls from 23 cents to 21 cents per pound. The company says it is increasing its tall oil rosin pricing by 1 cents per pound, and a sample change is "Unitol NCY-grade which rises from 22 cents to 23 cents per pound.

The previous week, Arizona Chemical Company cut its TOFA prices by 1 cents to 4 cents per pound, and Hercules Incorporated dropped its TOFA prices by 2 cents to 4 cents per pound.

A spokesman at Reichhold says his company cannot afford to lose any market share to competitors, and a Union Camp spokesman says his company's "adjustments reflect current market conditions."

TOFA producers are "very much at the mercy of soybean oil," says an industry source. The soybean oil price has been holding in the 17 cents to 18 cents per pound range for the past several weeks, while a year ago it was approximately 32 cents per pound. Present TOFA list prices show a similar relationship to those of a year ago.

Fractionators acknowledge that a good deal of business has gone to soybean oil based fatty acids over the past year, as TOFA prices were slow to respond to the fall in vegetable oil pricing. A large volume of business in the coatings industry switched over, and a considerable portion of the dimer acids market switched as well, sources say.

With TOFA demand yet to pick up significantly in 1986, stocks of 2 percent and over rosin content material have been built up from 23.588 million pounds at the first of the year to 39.741 million pounds on May 1, according to Pulp Chemicals Association.

Stocks of less than 2 percent rosin content material, which stores poorly and is said to be less sensitive to soya fatty acid competition, have been more stable during the period.

The price increases on rosin and rosin size are attributed by industry sources to a slight downturn in rosin inventory levels, modest demand, and, for rosin size, an upturn in the paper industry.

Correction: due to typographical errors, the amount of Arizona Chemical Company's price changes on distilled tall oil (DTO) and tall oil rosin (TOR) were incorrectly reported here last week.

Arizona's DTO product "Accintol D30LR" drops 1 cent per pound, from 24 cent to 23 cent per pound, effective June 1. Arizona's hot and canned TOR will increase by 1 cent per pound, effective July 1.

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP

Coconut oil, NY, 1c. per lb.
Cottonseed, 41% bulk, Memphis, $5 per ton
Soybean, 44% bulk, Decatur, $3.50 per ton

CHANGES/DOWN

Cottonseed oil, Valley, ½c. per lb.
Grease, white, choice, tanks, divd., NY, ¼c. per lb.
Grease, yellow maximum 10%, ffa tanks, ½c. per lb.
Soybean oil, Decatur, .20c. per lb.
Tallow, inedible, fancy guar.. tanks, divd. NY, ½c. per lb.
Tallow, inedible, fancy bleach., tanks, didvd. NY, ½c. per lb.

OILS, FATS INDEX

The Oils, Fats & Waxes Index reflects the prices of 11 representative materials in this sector and the quantity of each produced in 1985.

June 6, 1986	83.48
May 30, 1986	82.56
May 9 1986	83.91
June 7, 1985	99.37

Chemical Prices Start on Page 38.

FRIDAY SPOT PRICES

MARKET CLOSE/JUNE 6, 1986

CRUDE VEGETABLE OILS		
Coconut oil, NY	lb.	.14
Coconut oil, Pacific	lb.	.NA
Corn oil, Midwest	lb.	.1775
Cottonseed oil, Valley	lb.	.17½
Linseed oil, Minneapolis	lb.	.30
Palm oil, NY	lb.	.14¼
Peanut oil, Southeast (restricted)	lb.	.28ask
Soybean oil, Decatur	lb.	.1730
REFD. VEGETABLE OILS		
Coconut oil, t.w., NY	lb.	.1875
Coconut oil, jumbo tanks, NY	lb.	.25
Cottonseed oil, jumbo tanks, NY	lb.	.29¼
Peanut oil, jumbo tanks, NY	lb.	.3630
Soybean salad oil, NY	lb.	.2134
OILMEALS		
Cottonseed, 14% bulk, Memphis	ton	$130
Linseed, extracted, 34% bulk, Mpls	ton	$108
Peanut, 50% bulk, SE, Alabama	ton	.NA
Soybean, unrestricted, 44% bulk, Decatur	ton	$155.50
FATS & GREASES		
Grease, white, choice, tanks, divd., NY	lb.	.9¼
Grease, yellow maximum 10%, ffa tanks	lb.	.8½
Lard, loose, bulk tanks, divd., Chicago	lb.	.10
Tallow, inedible, fancy guar., tanks, divd ..., NY	lb.	.975
Tallow, inedible, fancy bleach., tanks, ...lb. divd., NY	lb.	.9½

VEGETABLE OILS

CASTOR OIL — The price is quoted at 31½c. per pound, and has been holding steady the past few weeks. The market is said to be very quiet, as stock levels are high both in the US and in Brazil.

An industry source says that, though the Brazilian crop appears to be a bit smaller than expected, consumption has lagged as well. While the Brazilians may make an effort to raise prices slightly, the heavy stocks should work against such a move, says the source.

India, which last year put competitive pressure on the Brazilians with a large crop, has not had a good crop this year, and reportedly is not even offering material.

PALM OIL — The price of this oil has been fairly stable the past several weeks following considerable erosion earlier in the year. Heavy Malaysian exports have cut into stocks at a time when production is declining, and this has brought the market more into balance, sources say.

India has been importing large quantities of oil since dropping trade restrictions, and the Soviet Union has been active in the market as well, says a trader. Malaysian stock levels that were nearly 1 million tons in the first quarter are said to have come down to approximately 800,000 tons.

The Malaysian Agricultural Attache's preliminary estimate for Malaysian production in April is 326,000 tons, virtually unchanged from March's 325,000 tons. Because produc-

OILS, FATS & WAXES

tion in the second quarter traditionally has been higher than the first quarter, a source says these figures likely reflect a decline in rainfall and the weevil stress syndrome following the heavy production of the past several months.

FATS & GREASES

TALLOW — Pricing in this market has continued to weaken, and the market "still doesn't look too strong," says an industry source. It is said that there have been no large export orders recently, and that domestic interest has been on the slow side.

Last week, Egypt was expected to take 30,000 tons of tallow. However, it took 20,000 tons of coconut oil instead. This leads an industry source to speculate that, since coconut oil is blended with tallow for soap production, the Egyptians must have a sufficient amount of tallow already on hand for their needs.

Palm stearine continues to provide strong competition for tallow, particularly in the Far East export markets, the source says.

WAXES

CARNAUBA WAX — The price of No. 3 wax is quoted between $1.35 and $1.45 per pound, and the price of No. 1 yellow wax is quoted between $1.90 and $2.05 per pound, both f.o.b. New York in bags. In carloads, the price is quoted at 80c. per pound for No. 3 grade and $1.25 per pound for No. 1 grade.

Pricing of carnauba wax is "uniform for the moment," says one US buyer, after it firmed up in the first quarter. Although another rise in prices from Brazilian sellers is not ruled out, he says, "we have good-sized stocks," and, at the present time, "there are more than several people willing to supply it," at stable price levels.

MISCELLANEOUS

COCOA BUTTER — The price is quoted between $1.90 and $1.95 per pound, and continues on a downward trend. There is "so much supply of butter available, and demand is rather passive," says a trader.

It is said that there is a good likelihood that Ivory Coast production will exceed last year's large figure, says the source. Overall, world production is seen as high this year, and growing over the long term as more trees are planted.

Price increases on candy and chocolate have cut into demand for these finished products, and this has contributed to lower cocoa butter consumption, says the source.

"Finished products demand is not strong," he says, and the great availability of cocoa butter gives producers little incentive to stock up on the material.

AROMATIC ORGANICS

Orthoxylene Recovery

Continued from Page 7

tically diminished export market. In 1980, exports totaled 484.8 million pounds and represented 51 percent of output. In 1985, exports shrunk to 75.4 million pounds and accounted for 10.8 percent of industry output.

Imports on the other hand grew rapidly. In 1981, the first year orthoxylene imports were tallied independently by International Trade Commission, foreign shipments into the US totaled 23.1 million pounds. Last year, imports increased to 15 percent of domestic production, totaling 108.8 million pounds.

Observers cite two reasons for the dramatic swing in the US orthoxylene industry's balance of trade, from net exporter to net importer: additional capacity worldwide and a fortified dollar.

"The US lost most of its exports, save for a small volume to South America," a producer says. "Russia is a major exporter interested in currency, not price."

"A stronger dollar," adds another producer, "gave producers overseas an advantage."

The emergence of the Soviets onto the scene in late 1983 endangered US orthoxylene producers' major export market, Europe. In their hunt for currency, the Soviets have also placed product in the US which has not only reduced domestic demand for US product, but has also weakened pricing.

Domestically-produced orthoxylene for the merchant market is used exclusively for the production of phthalic anhydride. Demand from this sector has also declined substantially the past few years.

Phthalic anhydride production totaled 1.04 billion pounds in 1979, dropping by 20 percent to 835.7 last year. Compounding this loss of business was the conversion by a phthalic anhydride producer, Koppers Company, Inc., of its reactor capacity from orthoxylene to naphthalene feedstock in 1985.

LOGICAL SWITCH FOR KOPPERS

The switch was a logical one for Koppers, the leading producer of coaltar naphthalene in the US, but for orthoxylene producers the shift translates into a loss of about 75 million pounds of demand a year.

While overcapacity and inexpensive imports have taken their toll on prices, a producer says additional price pressure has resulted from the competitiveness of the plasticizer business, the major outlet for phthalic anhydride accounting for more than half of demand.

"Orthoxylene has taken the brunt of the competitiveness of the plasticizer business," an orthoxylene producer says. "Orthoxylene producers have had to absorb the cost cutting."

The orthoxylene producer claims this is changing, however, noting that producers of plasticizers "are no longer trying to increase share at the sacrifice of margins."

Further brightening prospects for improved profits are lower crude oil prices which in turn encourages increased consumption. Increased housing and automotive sales bolster demand for phthalic anhydride.

Although no restoration to the former balance of trade is forecast, exports through the first quarter were running 10 percent ahead of last year's pace. Through March, exports totaled 26.4 million pounds.

Imports during the first quarter totaled 72 million pounds, up 56 percent from the same period a year earlier.

Contract prices for orthoxylene are reported between 12.5 cents and 14.5 cents per pound while spot market material is quoted at 12.5 cents per pound.

BHT — Producers report selling prices of approximately $1.25 per pound, and say that pricing has been fairly flat this quarter.

Neville-Synthese Organics, Inc. has been "struggling to recover some lost accounts" this year as a result of the company's takeover of the Oil City, Pa., unit from Koppers Company at the first of the year.

Uniroyal Chemical Company says that its "volume has picked up in the short term," and that Avery, Inc.'s purchase of Uniroyal Chemical from Uniroyal, Inc., expected to be consummated by June 30, will have "no real impact on (company) policy."

Producers have observed a decline in the effect of imports this year, and attribute this to the weakening of the US dollar. The level of imports is said to be down, and the undercutting of domestic pricing is said to be less prevalent.

BTX — Lower crude oil and gasoline prices have applied downward pressure to the benzene and toluene markets, industry sources note.

Spot benzene is quoted between 82c. and 86c. per gallon. There is said to be little activity in the market, as buyers hold off in anticipation of lower prices. At this point, says one trader, a seller "would have to offer a buyer a real incentive" to gain his interest.

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP

None

CHANGES/DOWN

None

AROMATICS INDEX

The Aromatic Organics Index reflects the prices of 14 representative materials in this sector and the quantity of each produced in 1985.

June 6, 1986	167.84
May 30, 1986	167.84
May 9, 1986	167.84
June 7, 1985	167.84

Chemical Prices Start on Page 32.

Spot toluene is quoted between 64c. and 66c. per gallon. Sources report that Shell Chemical Company has said it will pay no more than 62c. per gallon.

It is said that less than expected gasoline consumption over the Memorial Day weekend and high refinery operating rates have contributed to the downward pressure on pricing.

The xylene market is reportedly more stable and the price is quoted at 80c. per gallon. Over the past several weeks, industry sources have said that material has been difficult to obtain. "Some people have given up looking," says one observer, though another believes that material is beginning to become more available.

BENZYL CHLORIDE — A Velsicol Corporation spokesman says that the completion of the sale of its benzyl chloride unit in Chattannooga, Tenn. to an unnamed chemical company "is taking a little bit longer than earlier estimated." In early May, the company said it expected the deal to be completed within 30 days.

The Velsicol spokesman says the company is hopeful that the sale will be completed by mid-Summer. The transaction is part of the restructuring of Farley Industries, which purchased Velsicol's former parent company, Northwest Industries, Inc., which involves the sale of Northwest's specialty chemicals division, including the benzyl chloride plant.

DIHYDROXYNAPTHALENE — American Hoechst Corporation says it will increase the price of 2,3-dihydroxynaphthalene-6-sulfonic acid sodium salt. The change, effective July 1, will bring the price up to $8.75 per pound, f.o.b. American Hoechst warehouses.

According to the company, the move represents an increase of approximately 7 percent over the current effective market price, and is in response to higher costs for imported raw materials. The chemical is said to be used primarily in the reprographics industry as a coating for sensitized papers.

American Hoechst also says it will raise the price of beta hydroxynapthoic acid by 5c. per pound, effective July 1.

New contract prices will be: $2.25 per

AROMATICS

pound for truckload quantities, and $2.35 per pound for less-than-truckload orders. Prices are f.o.b. warehouse or US shipping point, duty paid. Hoechst attributes the price increase to increased costs for imported material caused by the weaker dollar.

MDI — Producers say it appears likely that half of the half of the 8c.-per-pound industry-wide price increase will be achieved. Though they say that demand is good and the market is tight, they acknowledge that competitive pressures have been strong.

"Essentially, there was some activity going on below (the level to which the price had been increased), and we chose not to have our customers penalized," one producer says.

One producer says he is hopeful that the shifting exchange rate will enable the full 8c. to go through by year's end. It is observed that imports accounted for approximately 20 percent of the US market last year.

PHENOL - Dow Chemical USA says it is increasing its phenol price by 3c. per pound, effective July 1. All other terms and conditions remain the same.

STYRENE — Amoco Chemicals says it is initiating a 1c. per pound temporary voluntary allowance (TVA) on styrene monomer. The price change, effective June 1, brings Amoco's effective price to 20c. per pound.

According to a company spokesman, the move reflects competitive market conditions. It is noted that the TVA can be removed upon seven days' notice, and it is expected that the price "will probably go as benzene goes."

Celanese Debt Upgraded

Standard & Poor's Corporation has raised Celanese Corporation's senior debt to A-minus from BBB-plus and its subordinated convertible debentures and preferred stock to BBB-plus from BBB. About $350 million of debt is affected.

CHEMICAL PROFILE

Continued from Page 50

resin, g.p. grade, bulk, frt. alld.; low, 10c. per pound same basis. **Current:** 31c. per pound, same basis; 30c. per pound, pipe grade, bulk, frt alld.

USES

Rigid pipe & tubing, including molded fittings, 43 percent; flooring, textile and other calendering uses, 10 percent; siding and accessories, 7.5 percent; coatings and paste processes, 6.5 percent; wire and cable, 6 percent; film and sheet, 3.5 percent; other extrusions, 8 percent; exports, 4.5 percent; bottles, 3 percent; other molding uses, 1.5 percent; phonograph records, 0.5 percent; all other, 6 percent.

STRENGTH

After a slow start, the pipe market, spurred on by a strong housing market, is consuming large quantities of resin. Vinyl siding is performing very well in the home rehabilitation market. Demand in this market was up 27 percent in the first quarter. A tight vinyl chloride monomer market has pinched PVC availability, prompting producers to launch a 2c. price increase in June.

WEAKNESS

Imports of PVC resin last year (400-million pounds) and finished goods (over 1-billion pounds) have cut deeply into domestic producers' markets, especially fabricated goods like footwear, luggage, and handbags. Despite the June price increase, sharp overcapacity depresses pricing and cuts deeply into industry profitability.

OUTLOOK

PVC is beginning to make important inroads into the large diameter pipe market (municipal waster and sewer pipe). Vinyl siding is also expected to gain more acceptance in the new housing market, as are vinyl window frames. Fabricated imports will continue to take a bite out of many other vinyl applications. Total growth for the market is pegged at 3 percent a year.

ALIPHATIC ORGANICS

Ethylene Producers Seeking Higher Prices for June, July

Ethylene producers hope to end a five-month period of price erosion with announcements for higher tabs this month and further increases in July. Sellers are asking 15 to 16 cents per pound for June and will attempt to add at least a penny to that for third quarter deliveries.

Prices during May averaged 14½ cents per pound, a 3½ cent per pound slide from early January transactions.

While suppliers enjoyed a period of profitability early in the year, they see little or no money being made right now as prices have dropped and feed costs have made a moderate comeback since April. While ethylene suppliers admit that they are covering cash costs, they assert that, overall, the product is losing money.

"Producers are looking at the full cost of production," says one supplier who adds "a few folks who are cracking ethane are making about ½ cent per pound, but everyone else has been losing money in the second quarter."

Notwithstanding the general improvement in the ethylene business since last year, producers see themselves slipping back into the red. "We were losing a lot more money last year but ethylene is still not making a profit," according to the producer who points out, "the question is whether producers have lost enough to make an attempt to improve margins."

Jack Doerr, of IPC Consultants, the Houston-based market research firm, has tracked the decline in profitability since the beginning of the year. "First quarter profits were 6.8 cents per pound on a cash cost basis for the industry as a whole. Prices have drifted down and feed costs have moved up since the first of April and profits are now about 1 cent per pound," says Mr. Doerr.

COSTS NOT BEING COVERED

He cautions however that cash costs do not include financial costs, distribution costs and general corporate overhead. With these costs included Mr. Doerr figures "(ethylene producers) are not covering offsite overhead and the full cost of ethylene production," at May price levels.

Another analyst doesn't see such a lean picture and puts May profitability, on a cash cost basis, at about 2 cents to 3 cents per pound. He adds however, that ethane, the primary olefin feed, should see stronger pricing in the third quarter and warrant a "pass-a-long" for ethylene. The analyst predicts that ethane contracts should gain about 3 to 4 cents from their current level of 15 cents per gallon. He says, however, that feeds will remain volatile since it is uncertain what the price of crude oil will do. "I wouldn't be surprised," notes the consultant, "if we saw a 4 dollar per barrel increase in the price of crude oil during the (third) quarter."

Spot prices quoted last week on the Gulf Coast, for the various ethylene feeds, along with their change since late March are as follows: 17¼ cents per gallon for ethane; up 1¾ cents, 26 cents per gallon for propane; up 1 cent, 30 cents per gallon for butane; unchanged, 38¾ cents per gallon for naphtha; up 5¾ cents and 36½ cents per gallon for gas oil, down 5½ cents.

Prices for these feeds have been volatile since the start of the second quarter as the crude oil market is fraught with uncertainty. In May spot ethane had been as high as 20 cents per gallon while propane reached 29 cents per gallon.

One major buyer, who is skeptical of ethylene producers' difficulties, concedes that feed prices have been unstable but doesn't expect a reversal in the latest downturn in natural gas liquid pricing. "Feed prices should stay down and we don't expect NGL's to increase ethylene costs," says the buyer.

While ethylene is not the money loser it was last year, the outlook has changed, especially for chemical producers integrated back to oil. Managers searching for ways to survive drastically reduced oil income are less tolerant of marginal operations. Says one analyst, "there will be a lot more pressure on marketers to increase cash flow and improve margins. Poor returns on ethylene especially during a period of strong demand will not be sufficient."

Ironically, while observers cite poor to nonexistent profits for ethylene suppliers, they also point out that supply demand conditions are healthy. Operating rates, according to one analyst "are in the mid-90 percent range," and producers agree that downstream markets, in particular polyethylene, are vigorous. "We expect polyethylene demand to gain by 5 percent in the second half of this year," claims one ethylene supplier. According to International Trade Commission figures, released last week, first quarter output of low density polyethylene was 2.12 billion pounds, a 3.8 percent increase over the first quarter of 1985. High density polyethylene production totalled 1.789 billion pounds, a 6.3 percent increase over first quarter 1985 figures. Polyethylene accounts for about 50 percent of ethylene's end uses.

Some producers with large internal needs for downstream production may find it easier to reduce sales if price increases are not gained. Says one of the consumer/suppliers, "we are consuming a lot of product at an increased rate...we would back away from the market if prices don't increase."

A number of observers see the June price initiative as a "trial balloon" for further firming in the third quarter. Says one analyst, "the success of the third quarter increase will depend on the effectiveness of the June move... whatever gain (producers) get in June will support a hike in July." Some producers may be hedging their bets however, in case the June initiative fizzles. "It is difficult to raise prices in the middle of the quarter and even harder to do so at the end," says one producer. He says the success of a June price hike would be "unusual" but expects it to at least dry up softer-priced spot markets and provide a firm basis for the July move.

On the supply side, the startup of Occidental Chemical's 500-million-pound-per-year unit in Lake Charles, La., originally scheduled for early 1986, has been postponed to "sometime in mid-June" due to a spate of "minor mechanical problems."

Phillips Chemical Co. has successfully added 12 million pounds per year of capacity at its Sweeny, Tex., 2.14-billion-pound-per-year plant as of mid-May.

Corpus Christie Petrochemical Co. plans to take an extended turn around at its 1.2-billion-pound-per-year unit early next year. Mobil has successfully restarted its 1.05-billion-pound-per-year Beaumont, Tex., unit on May 25 after a two-week turnaround. Exxon will be taking a one-month turn around at its

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP
None

CHANGES/DOWN
None

ALIPHATICS INDEX

The Aliphatic Organics index reflects the prices of 20 representative materials in this sector and the quantity of each produced in 1985.

June 6, 1986	222.80
May 30, 1986	222.80
May 9, 1986	222.80
June 7, 1985	203.80

Chemical Prices Start on Page 32.

ALIPHATICS

billion pound per year Baton Rouge, La. facility starting in mid-September.

BUTADIENE — Shell Chemical Company, according to a number of producers, has announced that it will be charging 14c. per pound for butadiene sold after June 2. This effectively lowers the price, by 2c. per pound, from its average selling price in May of 16c. per pound. A Shell spokesman, however, said his company would "decline to confirm or deny" the reported price move.

One producer, commenting on Shell's reported move says "it will be difficult for the rest of the industry to maintain prices (at May levels)." He notes that major butadiene consumers, such as styrene butadiene rubber makers "are not healthy" and will be looking for all the relief they can get.

Sources say that 14c. per pound may be close to the bottom for butadiene prices. Values for imported crude and finished streams are seen by domestic producers as the floor for butadiene values in the US. Recently, material has been moving through Rotterdam at 10 cents per pound according to one source. With a shipping charge of about 3½c. per pound to the US, one domestic producer says "we've got to be close to the bottom now."

PROPIONATES — Niacet Corporation has revised its price schedules on calcium and sodium propionates, in order to be "fully competitive with regional marketing conditions," according to a company spokesman.

Chicago, Ill. has been added to the list of freight equalization points, effective immediately. Other equalization points are Dallas, Tex., Verona Mo., and Linden, N.J.

The company is also offering a 9c. per pound "competitive allowance" on shipments to the West Coast. "The West coast allowance reacts aggressively to pricing offered by Taiwanese imports," according to a Niacet spokesman.

Niacet's list price, for truckload bagged quantities, for both calcium and sodium propionate, is 49c. per pound, f.o.b. Niagara Falls, N.Y.

OXO-ALCOHOLS — Shell Chemical Company says that its Deer Park alcohol units are running normally after a two week maintenance period ended in late May. The company has had production difficulties at the site since last Fall and was forced to put customers on 50 percent allocation since February. Shell would not comment on the present status of its allocation program but one industry source says that the company moved up from 50 percent to 75 percent allocations in June. He expects Shell to return to normal deliveries by July.

Until that time, bargeload shipments of alcohols such as n-butanol will be difficult to get. Some customers have had to settle for tank car shipments only during the reduced allocation period.

Alcohols affected by operating problems at the Deer Park site have been; n-butanol, iso-butanol and 2-ethyl hexanol.

Biotechnology Company

Continued from Page 5

and undesirable fatty acids and has no "fishy" odor. Large-scale culture ponds and processing facilities operated in Kona, Hawaii, allow the company to mass produce microalgae so that any desired quantity of EPA can be produced, Cyanotech says.

The company has been producing EPA in pilot facilities at Woodinville, but now wants to mount a commercial-scale operation at the Hawaiian site and is looking for a corporate partner to complete product development and assume responsibility for distribution. The company is talking with four unnamed major pharmaceutical firms about an EPA project, a spokesman says.

Cyanotech plans to produce algal EPA in two forms; first as a dried algal powder containing approximately 10 percent EPA for over-the-counter sale as a health food, and, second, as a purified oil containing at least 75 to 80 percent EPA.

Procedures for production of the dried 10 percent powder are "pretty well set," the spokesman says, adding that a commercial product could be available by the first quarter of 1987. The company is working on refining its extraction and purification procedures for the purified product, he says.

Sulfur Lease Proposed By Interior Department

Interior Department's Minerals Management Service (MMS) is requesting preliminary expressions of industry interest in a proposed sulfur lease sale in the Central and Western regions of the Gulf of Mexico's Outer Continental Self. Comments are also sought on a preliminary proposal for salt leasing in connection with the extraction of sulfur.

MMS director William D. Bettenberg noted that there are currently four active sulfur leases in the Gulf, off the Louisiana coast but that no sulfur lease sale has been held since 1969.

"A new lease sale is being considered now because sulfur use has outpaced production in recent years and stockpiles are being exhausted at a steadily increasing rate," Mr. Bettenberg said.

In citing the need to encourage new sulfur exploration, Mr. Bettenberg said, 'We should act now to prevent a serious shortfall of sulfur in the near future. There is a developing market for new sulfur production and we have the sulfur resources offshore to help supply that market."

Of the three US companies that mine sulfur, Freeport, Pennzoil Sulfur and Texasgulf only Freeport is currently involved in offshore mining.

A spokesman for Freeport said the company was "interested" in the MMS request. In addition he said that Freeport is currently in the process of reopening one of its offshore mines.

Fluoroelastomer Plant On Stream for 3M Co.

3M Company has brought on stream what it calls the first major fluoroelastomers production facility in Europe at Antwerp, Belgium. In addition, the company signed an agreement with Hoechst AG under which Hoechst will supply certain fluoroelastomer latexes to 3M that will be further processed at Antwerp.

The new plant at Antwerp doubles 3M's fluoroelastomer capacity to 4,000 tons per year. The company already operates a plant in Decatur, Ala. 3M says the supply arrangement with Hoechst will enable the company to add another 1,000 tons of capacity at Antwerp within a year.

Hoechst, is well along on its program to boost "Hostaflon" fluoropolymer capacity at its Gendorf, Germany plant which are fluoroelastomer precursors. The company plans to double its polytetrafluoroethylene (PTFE) at Gendorf to 7,000 metric tons per year. At the same time, the company is expanding tetrafluoroethylene monomer capacity at Gendorf and hexafluorpropylene monomer capacity.

Obituary

Rudolf G. Sonneborn

Rudolf G. Sonneborn, retired chemical and petroleum company executive, died June 1 in Danbury, Conn. He was 87 years old.

Mr. Sonneborn started his business career over sixty years ago when he joined what was then L. Sonneborn Sons, Inc., a family-owned petroleum and chemical business, after having attended Harvard University's graduate school of business administration.

Mr. Sonneborn became president of L. Sonneborn Sons in 1953. He was a founder of the Twenty-five Year Club of the Petroleum Industry and also served as president of the Oil Trades Association of New York. In 1955 Mr. Sonneborn purchased an oil company in Israel from Mobil Corporation and renamed it Sonol Israel Ltd., today one of the three leading oil companies in Israel.

In 1960, after a serious illness, Mr. Sonneborn's company was merged into Witco Chemical Corporation. He became a member of the board of directors of Witco and remained a director until his retirement in 1968.

DRUGS & FINE CHEMICALS

Ephedrine Derivatives Firm As Cold Remedies See Growth

Ephedrine derivative sales have grown strongly during the last year, industry observers agree. They disagree on the outlook for future growth however.

Most industry spokesmen say that predicted growth of about 10 percent has materialized for the primary ephedrine derivatives: ephedrine hydrochloride, ephedrine sulfate, pseudoephedrine hydrochloride, and pseudoephedrine sulfate. In fact, one importer lays claim to a 20 percent growth.

One of the largest sources, Burroughs Wellcome, comments that growth for "Actifed" has been very good to date. In 1983, Burroughs brought its then-prescription "Actifed" to the over-the-counter market.

If growth does occur, it appears certain that it won't be spurred by the use of ephedrine derivatives as a substitute for phenylpropanolamine hydrochloride in some formulations, such as cold remedies. PPA hcl is being studied by the Food & Drug Administration regarding trace amphetamine content. A ruling was scheduled for February 15, but no decision has been made yet. Despite this, sources unanimously agree that there is no potential growth in this area.

EPHEDRINE DERIVATIVES USED

However, most of the major cold remedies use ephedrine derivatives, particularly pseudoephedrine hcl. "Nyquil" (Richardson-Vicks), "Actifed" and "Sudifed" (Burroughs Wellcome), "Drixoral" (Schering-Plough), and "Co-Tylenol" (Johnson & Johnson) all use an ephedrine derivative as an active ingredient. "Comtrex" (Bristol-Myers) uses PPA hcl, though, and a SmithKline Beckman spokeswoman says "Contac" will use PPA hcl when it returns to the shelves.

"Nyquil" has the highest market share (12 percent), while Burroughs' "Actifed" and "Sudifed" are second and third, respectively, combining for a 19-percent market share. These figures are reported by Charles H. Kline & Co. Kline pegs sales growth for cold remedies at about seven percent.

Price increases could come because of increased costs in labor, materials and transportation, say sources. One spokesman says a price increase has been "talked about for quite a while," but that it always comes down to "who is willing to take a chance." Another spokesman thinks Knoll AG's capacity expansion will affect market conditions. By 1987, Knoll, part of the BASF group, will reportedly have a capacity of 700 metric tons, making it by far the largest source of ephedrine derivatives.

Knoll lists the following prices: $40.25 per kilogram for ephedrine hcl, $45.25 for ephedrine sulfate, and $55.50 per kilogram for pseudoephedrine sulfate. An importer of Chinese material lists prices of $43 per kilogram for ephedrine hcl, and $62 per kilogram for pseudoephedrine hcl. West Germany, the US and China are the main sources of ephedrine derivatives.

ASPIRIN — Dow Chemical U.S.A., Midland, Mich., is raising its aspirin prices, effective July 1. List prices of the following products are being raised 10c. per pound: Aspirin granules, 10 percent starch, $2.07 per pound; aspirin crystals, $2.05 per pound; and 100 percent aspirin granulation, $2.15 per pound. All terms and conditions will remain the same. A spokesman says the increase represents strengthening global demand.

CALCIUM PANTOTHENATE — Hoffmann-La Roche, Nutley, N.J., reports the latest in a series of industry-wide B-vitamin price increases. Effective immediately, the company's d-cal-pan price will be $11.50 per kilogram, up from $10.50 per kilogram. BASF Corporation raised its price May 26 (CMR, 5/26/96, pg. 16).

A Hoffmann-La Roche spokesman says the increase is because of depressed prices during the last two and three years. Prices for other B-vitamins, such as pyridoxine hydrochloride, thiamine hydrochloride and thiamine mononitrate, have also been increasing recently. All of these products are said to be returning to levels of the early 1980's.

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP

Calcium Pantothenate, $1 per kilo
Iodoform, $1 per lb.
Potassium iodide, .80 per lb.
Purified Iodines, $1 per lb.
Sodium iodide, .85 per lb.
Thymol iodide, .50 per lb.

CHANGES/DOWN

None

DRUGS INDEX

The Drugs & Fine Chemicals index reflects the prices of 10 representative materials in this sector and the quantity of each produced in 1985.

June 6, 1986	211.16
May 30, 1986	211.16
May 9, 1986	211.16
June 7, 1985	211.16

Chemical Prices Start on Page 32.

DRUG & FINE CHEMICAL EXPORTS: MARCH

BUREAU OF CENSUS FIGURES ON THE KEY DRUGS.

		MARCH QUANTITY	MARCH $ VALUE	FEBRUARY QUANTITY	FEBRUARY $ VALUE
Antibiotics:					
Ampicillin and salts, bulk	gms.	476,415	836,036	17,074	537,050
Erythromycin	gms.	77,608	7,493,665	69,395	9,035,093
Penicillin G salts, bulk	blu.	3,432,667	261,970	685,408	278,513
Penicillins, nspf	blu.	168,169	7,041,647	141,954	4,195,401
Tetracycline	gms.	3,083	1,807,294	1,551	2,002,740
Aspirin	lbs.	468,108	650,227	296,460	403,561
Caffeine and deriv.	lbs.	109,264	177,314	19,127	50,162
Citric acid	lbs.	386,326	463,534	1,138,761	775,336
Opium alkaloids and deriv.	lbs.	835	130,600	2,400	291,935
Hormones:					
Corticosteroids, nspf	lbs.	3,205	5,460,722	6,631	11,025,825
Nonsteroid hormones	lbs.	1,636	1,320,375	2,740	1,072,279
Prednisolone and esters salts	lbs.	5,179	5,528,728	4,986	7,296,235
Steroid hormones and synthetic	lbs.	168,009	5,393,395	286,247	4,263,193
Sulfonamides, bulk	lbs.	58,389	669,623	122,611	1,548,858
Vitamins:					
Ascorbic Acid	lbs.	122,229	563,203	80,177	325,296
Vitamin A and Pro-vitamin A, bulk	lbs.	127,339	163,212	70,474	39,968
Vitamin B_1 (thiamine)	lbs.	16,430	170,054	110	2,025
Vitamin E	lbs.	36,940	733,449	104,580	1,449,077
Vitamin B_{12}	lbs.	16,460	35,705	139	5,490
D and Dl pantethonic acid	lbs.	2,205	16,710	—	—
Niacin and niacinamide	lbs.	54,041	131,595	49,256	108,050
Vitamins, nspf	lbs.	100,862	736,725	144,777	466,169

DRUGS & FINE CHEMS

IODINE PRODUCTS — Mallinckrodt, Inc., St. Louis, reports that effective June 1, it raised its prices for several iodine products, because of recent increases in crude iodine prices (CMR, 5/19/86, pg. 21).

Potassium iodide has been raised by 80c. per pound, up to $12.05 per pound. Sodium iodide now costs $17.19 per pound, a hike of 85c. per pound. Purified iodines were increased by $1 per pound, up to $17.62 per pound. Also, two specialty iodines were increased. Thymol iodide now costs $57.20 per pound, an increase of 50c. per pound, and iodoform was raised by $1 per pound, up to $24 per pound.

All price increases apply to both list and discounted-list prices. Current customers have been given 30-days' price protection.

POTASSIUM BENZOATE — American International Chemical, Inc., Natick, Mass., is now offering potassium benzoate in flake and dense form, according to a spokeswoman for the company.

She notes that potassium benzoate is being widely used as a replacement for sodium benzoate in applications in which low sodium content is needed, such as in some food applications.

The spokeswoman stresses that AIC will still be providing sodium benzoate, and that the company is not making a complete switch to potassium benzoate. The product is kept in Totowa, N.J., Chicago, and San Francisco.

The material is priced at 91c. per pound for flake, and 97c. per pound for dense.

THIOGLYCOLIC ACID AND DERIVATIVES — The Evans Chemetics Unit of W.R. Grace & Co. reports it is raising prices for thioglycolic acid and several derivatives, effective July 1.

Thioglycolic acid, concentrated, will increase by 19c. per pound, to $2.07 per pound. Thioglycolic acid 80 percent solution is increasing 15c. per pound to $1.69 per pound. Also, ammonium thyioglycolate will increase by 12c. per pound to $1.36 per pound, and glycerol monothyioglycolate is increasing 19c. per pound to $2.13 per pound. A spokesman notes that there are other increases as well, but these are the major products that will be affected.

This is the first price increase in four years for these products, says the spokesman. He adds that a price increase was attempted late last year, but never materialized.

Lubrizol Specialties Plant Dedicated in South America

Lubrizol Corporation, Wickliffe, Ohio, has formally dedicated a Venezuelan specialty chemicals manufacturing facility constructed in joint venture with Corporacion Grupo Quimico, C.A.

Operated by the newly formed joint venture firm, C.A. Lubricantes Quimicos, L.Q., the facility brings to 17 the number of Lubrizol specialty chemical plants in operation.

The plant will manufacture high-technology additives for gasoline and diesel engine oils and gear oils, as well as viscosity improvers and high molecular weight dispersants to be supplied to the Venezuelan petroleum industry.

Speaking at dedication ceremonies at the site in San Diego de Valencia, West of Caracas, L.E. Coleman, Lubrizol's chairman, said the new manufacturing plant "introduces a major advance in the production and supply of specialty chemicals to the Venezuelan oil industry.

Sulfite Labeling

Continued from Page 7

some steps need to be taken to protect the sulfite-sensitive consumer.

The report said FDA's proposal to require labeling of sulfites in packaged foods that contain significant residual levels may be unreasonable since current analytical methods are inaccurate at low levels.

The researchers said the label declaration limit could be raised to 25 or 50 ppm without putting sensitive consumers at any greater risk. They concluded that banning selected uses of sulfites is not justified with the possible exception of the direct use of sulfites in restaurants where most of the severe reactions have taken place.

The search of alternatives to sulfite should be continued, Dr. Taylor told a Washington news conference.

"Given the small number of individuals identified as sulfite-sensitive and potential severity of the reactions, label declaration and restricted bans of unlabeled and poorly controlled uses of sulfites sould be sufficient means to allow avoidance of potentially hazardous, sulfited foods," he said.

An overall ban of sulfites in foods "does not appear warranted," Dr. Taylor added.

Sulfites are used in many foods and beverages, IFT points out, with the highest total levels occurring in dried fruit (excluding dark raisins and prunes), non-frozen lemon and lime juice, wine, molasses and sauerkraut juice. Dried potatoes, grape juices, wine vinegar, gravies, sauces, fruit toppings and maraschino cherries are also modest sources.

Pectin, fresh shrimp, corn syrup, pickles and relishes, starch, hominy, frozen potatoes, maple syrup, jams and jellies (imported only) and fresh mushrooms also typically contain sulfite at amounts at or above FDA's label triggering level.

Most people's body chemistry metabolizes sulfites by means of an enzyme, sulfite oxidase, and the product is excreted as harmless sulfate. This is true whether the sulfites are consumed or inhaled.

Most persons can safely consume substantial quantities of sulfites without consequences, and even some sulfite-sensitive people can ingest 100 to 200 milligrams without reaction.

"However, the more sensitive individuals (5-50 mg thresholds) can easily obtain a provoking dose of sulfite in a single meal," the IFT report says.

Du Pont Company Exits Heat Exchanger Business

E.I. du Pont de Nemours & Co. has sold its "Teflon" heat exchanger business to Ametek Inc. Du Pont did not disclose terms of the sale, which includes product and manufacturing technology and dedicated equipment, but said it will not materially affect its earnings.

"Teflon" heat exchangers were developed for heat transfer in corrosive operations. Primary markets for the heat exchangers include pickling operations in the metals and steel industry, metal plating in widely diverse industries, and corrosive operations in the chemical industry.

Dow Sells Millipore Stake

Dow Chemical Company has sold its total holdings in Millipore Corporation through Smith Barney Harris Upham & Co. and Alexander Brown & Sons, Inc. Dow reported in 1984 that it had purchased approximately 9.3 percent of the outstanding shares of Millipore.

DuPont Sets

Continued from Page 3

"Hytrel" polyester elastomers from Du Pont-Toray, a joint venture.

"It is a primary goal of ours to market our technology and expertise internationally," Mr. McAndrews, says "and we believe our new organization will greatly facilitate our doing so."

The new department will initially be comprised of segments from existing Du Pont departments including polymer products and finishes and fabricated products.

Mr. McAndrews says the new department is a major step in a series of recent actions to strengthen the firm's commitment to the automotive industry.

Earlier this year, Du Pont signed an agreement to purchase the Ford Motor Company's North American automotive paint operations, and opened a multi-million-dollar technical service laboratory in Troy for the development of thermoplastic autobody parts. Later in 1986, the company will open a full-scale state-of-the-art coatings applications laboratory in Troy.

Chemical companies have continued to enlarge their technical service and development facilities in the Detroit area in an effort to forge closer links with their customers.

Within the last month, for example, Ciba-Geigy Corporation opened a $3.5 million marketing, development and technical service center in Madison Heights, Mich. and Mobay Chemical Company dedicated an expansion of its automotive headquarters offices in Troy, Mich.

BASF Inmont will complete a $15 million robotized auto paint applications laboratory at Southfield, Mich at the end of this month for start-up in the third quarter which will duplicate the workings of an auto plant and handle full-sized car and truck bodies.

In April, the company introduced a new line of water-borne base coatings which, with solvent-borne clear coats, will be the automotive coatings of the future, BASF Inmont says.

HEAVY & AG CHEMICALS

American Chrome and Diamond Raise Chrome Chemical Prices

US producers of sodium bichromate and chromic acid are raising prices this month, and indications are that the increases will hold. Working in their favor are a plant shutdown by one overseas producer, the decreased value of the US dollar, and generally depressed price levels.

American Chrome & Chemicals and Diamond Shamrock have hiked chromic acid five cents per pound and sodium bichromate three cents per pound. Chromic acid moves to a list level of $1.08 per pound while bichromate will remain at 57 cents per pound for crystals, 52 cents per pound for solution, the increase being for off-list prices.

American Chrome's increase was effective June 1 (CMR, 5/12/86, pg. 26) while Diamond Shamrock's was effective May 19 for spot customers and June 18 or as terms permit to contract customers.

Pre-hike selling prices for large buyers of both items, however, are reported to be much lower: in the 35- to 40-cent-per-pound range for crystalline sodium bichromate and from 85 to 90 cents per pound for chromic acid.

Understandably, US producers and importers alike feel the increase is much needed. Observers say that US producers have kept their prices very depressed for the last several years to discourage import competition, which was almost non-existent five years ago.

Nevertheless, imported material seems to be here to stay, despite the depressed pricing. The major overseas players in the US market are Bayer AG, Kromsan of Turkey, British Chrome, Luigi Stoppani SpA of Italy and the Soviet Union. All told they account for approximately 10 percent of the US chrome chemical demand.

ITALIAN FACILITY SHUT

Sources say that price increases in Europe as well as changes in the value of the dollar with respect to European currencies have put upward price pressure on overseas material. This phenomenon does not effect USSR and Rumanian product, however.

Bureau of Census figures show that through March bichromate and chromate imports from USSR are about one-half million pounds, almost twice year-earlier level, despite claims by others in the industry that the material is of inferior quality.

To justify the price hike, producers and importers alike point to the shut-down, earlier this year, of Stoppani because of pollution problems. Sources say Stoppani had been on and off since January and is now down totally.

Bureau of Census figures imply that the effect of the shutdown has been mostly on chromic acid. Italian imports through March are under 400,000 pound, less than half the corresponding figure for 1985. Imports of sodium chromate and bichromate, however, have increased from about one-half million pounds to over two million pounds for the corresponding through-March periods.

According to a source at White Cross Laboratories Inc., the exclusive distributor for Stoppani in the US, Stoppani says that it has inventories of bichromate crystal to last over a year, so that these supplies should not pose a problem.

Biochromate solution, says White Cross, is well stocked in the US, although shipments from Italy are not expected until the end of the year. Chromic acid is not well stocked here or in Italy but shipment is expected to restart by the middle or end of the Summer.

The Stoppani shutdown has provided at least a temporary new market for US material. Through March amost one million pounds of chromic acid, one-quarter of all acid exports, have been shipped to Italy from Diamond Shamrock's plant. No exports to Italy occured in 1985 until December.

In general, chromic acid demand is said to be stronger than bichromate demand. Wood treatment continues to grow, producers say, especially as the high demand Summer approaches. Opinions about metal treatment vary, with one producer claiming that Detroit's recent upswing in auto production has helped and the other saying it hasn't.

Sodium chromate demand is still in the doldrums, according to sources. In addition to long standing poor sales to the leather tanning, pigments and water treatment businesses, use in oil drilling muds has of late dropped considerably, as the number of US oil rigs is at a long-time low.

One change that is sure to affect the domestic business is the impending sale of Diamond Shamrock's chemicals business to Occidental Petroleum.

While Oxy's plans for the chrome line are not clear, one observer points out that, in the meantime, Diamond is likely to act for the short-term only.

In fact, most observers feel Occidental has little use for the business and will probably try to resell it.

One source cites a rumor that Bayer, the world's largest producer of chrome chemicals, has placed a bid with Occidental for the business.

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP
None

CHANGES/DOWN
None

HEAVY & AG INDEX

The Heavy & Ag Chemicals index reflects the prices of 18 representative materials in this sector and the quantity of each produced in 1985.

June 6, 1986	113.69
May 30, 1986	113.69
May 9, 1986	113.69
June 7, 1985	113.69

Chemical Prices Start on Page 32.

BASES & SALTS

CHLORALKALI — Following Dow Chemicals' lead (CMR, 6/2/86, pg. 28), several chloralkali producers have announced price increases. For chlorine, LCP Chemicals & Plastics has gone up $25 per ton, Occidental Chemicals has gone up $15 per ton and Vulcan has gone up $10 per ton. In addition, all three producers have increased caustic soda prices $10 per ton for all grades.

For all, prices are effective immediately on spot purchases and as terms allow for contract business. Prices are freight equalized with recognized competitive producing points.

Also, producers say that upon reauthorization of superfund, the tax will be added as a separate line item to each invoice.

Producers cite high operating rates and strong demand, especially in the North, as justification for the hike. According to the Chlorine Institute, April effective operating rates were 89.4 percent, the highest level in over two years.

Chlorine price initiatives in January and April have been for the most part successful, particularly the latter one.

According to one source, selling prices in the Gulf to the VCM market have increased from the low $120's in January to up to $145 per ton in May.

METALS & MINERALS

ZINC — Falconbridge Ltd. announced last week that, effective immediately, for sales outside North America, the base selling prices for "Kidd Creek" brand zinc metal has been increased to $800 per metric ton from $760 per metric ton.

PVC Producers

Continued from Page 4

fill orders domestically, commit their surplus to the export market up to two months in advance.

VCM exports climbed over 377 million pounds in the first quarter this year, which is equivalent to 1.5 billion pounds annually. Last year, US exports just exceeded 1 billion pounds. Observers say plant turnarounds in Taiwan and Korea has caused this sharp rise in overseas orders.

These two developments, sources say, deprived PVC makers from being able to turn out as much resin as they would like, which has led to tighter PVC supplies at a period of high demand, hence the push for higher prices.

Even with a successful June increase though, PVC prices would only return to April levels. According to one source, resin prices slipped last month, because PVC pipe makers, the largest resin consumers, resisted buying resin at 30 cents per pound, mainly because pipe prices were weak and business was sluggish.

An industry observer recounts that pipe inventories soared early in the year when pipe makers bought large quantities of resin prior to a PVC price increase, and demand for PVC pipe got off to a slow start. Society of Plastics Institute figures show that pipe and tubing consumption of PVC resin in the first quarter sagged 8 percent below 1985 levels. In this weak market, a source says, pipe makers were able to push resin prices down.

SOARING PIPE DEMAND

At present though, the shoe is on the other foot. The construction market is booming throughout the country, PVC pipe demand is soaring, pipe and resin inventories are falling, and pipe makers are buying large quantities of resin. The 2 cent June increase stands a good chance of holding, an industry observer says, if the pipe market continues to run strong through its traditional Summer "plant holiday" period. If demand prompts pipe makers to run though July and August, the observer says at least part of the resin increase should stick.

Another factor pressuring PVC prices, producers say, are rising prices for feedstocks ethylene and chlorine. Ethylene producers are seeking 1 to 2 cent per pound price increase for June and a similar increase for July. At the same time, chlorine makers are pushing price increases of $15 to $25 per ton for July, which follows a generally successful increase posted in April. Chlorine prices have already climbed from $120 to $145 per ton on the Gulf Coast ~~this year.~~

VCM prices, meanwhile, remain at 15 to 16 cents per pound for the time being. However, if the PVC increase sticks, one VCM producer says he'll try to push through the April 1 VCM 2 cent per pound price hike which was largely unsuccessful.

PLASTIC MATERIALS

POLYSTYRENE — Several more firms have joined a move to raise polystyrene resin prices. Reacting to increases in styrene monomer prices, Huntsman Chemical Company, Dow Chemical Company and Monsanto Company earlier announced price increases for crystal and impact grades, effective July 1 (CMR 6/2/86, pg. 30). Dow raised prices 3c. per pound, and Huntsman and Monsanto raised prices 2c. per pound.

In a related move, Dow also announced a 4c. per pound increase for "Styron" ignition resistant polystyrene precolored black grades, and 3c. per pound for natural grades, effective also on July 1.

The Cosden Division of the Fina Oil & Chemical Company has joined the initiative with a 3c. increase in selling prices for all grades of polystyrene resins, effective July 1. Polysar Inc. has announced a similar increase. Chevron Chemical Company and Mobil have raised prices also.

A spokesman for a polystyrene producer asserts that margins for the resin have been under pressure due to rising feedstock costs over the past few months. He concedes that feedstock costs had declined in January, but points out that resin prices eroded then also.

While costs "are always a factor in making a decision," according to a spokesman for another supplier, the current supply and demand situation also plays a role. He reveals that the industry is currently running very close to capacity. "We are sold out and have been for a while," says still another spokesman. He says that his company is tight on both impact and crystal grades, and adds that "nearly everyone else is too."

He continues that demand prospects for this Summer look bright. His customers report strong business and may alter their typical Summer production schedules, which would include shutdowns for vacation in July. The resin supplier says that some converters are running hard in June in order to build inventory to see them through July shutdowns, while other resin users intend to shut down for a shorter than usual period.

ZINC OXIDE — Pacific Smelting Company has raised its list prices by 4c., effective June 2. The move, which raises the list price for activation grades to 49c. and the list price for French process grades to 50½c. per pound, brings the company's list prices into line with those of most other major zinc oxide producers.

A company spokesman attributes the increases to firming zinc metal prices as well as to general strength of the oxide market. He relates that zinc metal firmed twice in May, and increased in price by a total of 5c. per pound in that month.

The base value of raw material for oxide is tied to the metal market, the spokesman says. He notes that the current metal situation "is tightening up the whole picture."

Several other producers said last week that they had made no announcements of increased list prices, and noted that the Pacific Smelting move brings the company up to levels already posted by other producers.

One competitor notes, however, that there has been a strengthening in the marketplace. He says demand is strong currently, and the Summer months won't produce much of a lull. Demand is up by "a couple of percent" over year-to-date figures from last year, he estimates, and he speculates that the full year could see similar growth compared to 1985.

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP
None

CHANGES/DOWN
None

COATINGS INDEX

The Coatings & Plastics Index reflects the prices of 13 representative materials in this sector and the quantity of each produced in 1985.

June 6, 1986	306.4
May 30, 1986	306.4
May 9, 1986	306.4
June 7, 1985	306.4

Chemical Prices Start on Page 32.

THERMOPLASTICS

BULK PRICES IN MAY

	MAY (US $)	APRIL (US $)
Polyethylene-LD, liner ....lb.	.26-.28	.28-.31
Polyethylene-HD, injection ..lb.	.24-.26	.25-.29
Polyethylene-LLD* ....lb.	.25-.26	.29
Polypropylene, molding .....lb.	.33-.36	.33-.35
Polystyrene, g.p. ....lb.	.28-.32	.31½-.33
Polyvinyl chloride, pipe ......lb.	.30-.32	.26-.30

*Butene-1 comonomer.

PERFUMES & FLAVORINGS

Peppermint Oil Inventories Down; Midwestern New Crop Acreage Up

New crop acreage figures for 1986 mint oils indicate some growth in anticipated Midwestern peppermint oil production while some carryover inventories from last year are down substantially from the previous year, particularly in Willamette and Midwestern grades.

Some traders voice concern over very dry weather in the Far West which will affect farms dependent on reservoirs for irrigation. However, caution is still prevalent, and predicting any market changes because of this development is considered premature. "It's kind of early to draw rash conclusions," says a Far Western oils source. The dry weather would exert the greatest effect on Yakima grade peppermint and Far West Scotch and native spearmint oils.

Midwestern peppermint growers reportedly experienced a relatively mild setback earlier this year due to "some dryness and wind conditions" which ripped out some plantings. The market is up slightly, with some contracts being written at $14 per pound, sources report.

CARRYOVER SUPPLIES ASSESSED

"The lack of moisture doesn't bother me," says a Midwestern oils trader, who cites experience with better oil yields after hot weather. Crop conditions are curently characterized as average, having stabilized after the early setbacks, and market movement is described as slow.

"Willamette is getting expensive, going up and up," says a New York essential oils broker. Increased preference for Willamette has been cited in the last six months, which has affected demand.

Spot and contract levels are quoted at $11 per pound by Far Western trader; a Midwestern trader says $12 or $13.50 levels would be more accurate.

Carryover supplies were estimated down about 460,000 pounds this year, to about 185,000 pounds. "Not much inventory is available," says one trader, "carryover supplies were definitely dwindled into" during the interim season.

This market is characterized with some degree of inconsistency, with sources reporting increased demand but that farmers are having difficulty commanding higher prices.

"We've reached a stalemate," says a Willamette Valley source. "Very few growers were willing to accept contracts at $11, but the market is expected to remain at that level, possibly to go a bit higher," the source comments.

Crop conditions for 1986 in Willamette grade are described as average, but some growers had had to treat fields with more than usual amounts of pesticides, which will affect costs, but not supplies.

Madras grade peppermint oil is described in very short supply, and yields for 1986 are expected to be lower than last year. Another source reports few inquiries for this oil, adding that when the Madras price becomes comparable to Midwestern, which is regarded as higher quality, substitution tends to occur.

Spot and contract figures are down by 3,000 acres and carryover stocks up over 100,000 pounds, a Far Western source reports. Spot and new crop prices are quoted at $7 per pound, with moderate movement of oil, according to one source. "Prices will remain depressed for some time," this observer concludes.

PRICE HIGHLIGHTS

PERFUMES IN MAY

PEPPERMINT	6/9/86	2/24/86
Eastern		
Oregon/Idaho	$8-$8.50	$9.50-$10.50
Madras	$13-$14.50	$14-$14.50
Midwest	$13-$14	$14
Willamette	$11-$13.50	$11.50
Yakima	$8.50-$10.00	$9.50
SPEARMINT		
Far West, native	$10.75-$11.50	$10.75-$11.50
Midwest, native	$12	$12
Far West, Scotch	$14.50-$15.25	$15
Midwest, Scotch	$14.50-$15.25	$15

AROMA CHEMICALS

BEAVER CASTOREUM — This specialty recently experienced a $10-per-pound price reduction, according to one aroma chemicals broker. He cites lower prices quoted at a Canadian fur auction which periodically trades beaver castoreum.

PRICES TRENDLINES

WEEK ENDING JUNE 6, 1986

CHANGES/UP

Caraway seed, Dutch recl., 10c. per lb.
Dill seed, Indian dewhiskered recl., 2c. per lb.
Fennel seed, Egyptian, 3c. per lb.
Fennel seed, Chinese light, 3c. per lb.
Fennel seed, Turkish extra, 3c. per lb.
Laurel leaves, Turkish semi-select, 4c. per lb.
Laurel leaves, Turkish hand-picked in ctns, 10c. per lb.
Nutmeg, East Indian recond. Dutch, 10c. per lb.
Pepper, Muntok white, 5c. per lb.
Pepper, Brazilian white, 20c. per lb.

CHANGES/DOWN

Allspice, Central American, 2c. per lb.
Annatto seed, Indian very limited, 10c. per lb.
Cardamoms, Indian bleached, 10c. per lb.
Cinnamon, H-2, 5c. per lb.
Cloves, Madagascar/Brazil, 5c. per lb.
Cumin seed, Turkish, 2c. per lb.
Fennel seed, Indian NPNS, 4c. per lb.
Ginger, Jamaican No. 3, 30c. per lb.
Onion, chopped, 7c. per lb.
Pepper, Malabar black, 1c. per lb.

PERFUMES INDEX

The Perfumes & Flavorings index reflects the prices of 11 representative materials in this sector and the quantity of each supplied in 1985.

June 6, 1986	71.00
May 30, 1986	71.00
May 9, 1986	71.00
June 7, 1985	82.44

Chemical Prices Start on Page 32.

SEEDS & SPICES

NUTMEGS — After plateauing at $2.60-per-pound levels, East Indian reconditioned Dutch grade spice leaped forward again, last week to $2.70 per pound.

"Nutmegs flared up again this week, as all offers advanced on some good demand," comments one broker. Mace has not yet followed suit.

OREGANO — In the wake of 10c. to 15c. increases in pricing recorded two weeks ago, Mexican oregano is characterized as being in short supply until Winter, according to one spice broker.

However, "offers for new crop Turkish oregano are not yet attractive enough to revive demand from here," this broker observes.

Turkish 30 mesh oregano is quoted at 80c. per pound; Greek 30 mesh, 93c. per pound; Mexican extra fancy, 90c. per pound; Moroccan, 82c. per pound.

CASSIA — "Resellers continue to offer shipment and afloat parcels below replacement," says one spices source regarding the Indonesian cassia market, adding, "origin is unable to sell at its levels."

Korintiji A cassia is quoted between [illegible] and 92c. per pound; Korintji B, 70c. to [illegible] per pound. "Sales of Chinese Tunghing cassia will also put pressure on Padang," says the source.

CHEMICAL IMPORTS

US imports of chemicals and related materials are reported in this section by CPI masterial. Listings include consignee where possible, container, net weight, name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

US chemical imports/exports are tabulated monthly in the market reports.

A-B

A L ZINC BACITRACIN A L Laboratories 800 bgs (41,039 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5.
ABS RESIN Goldmark Plastic Compounds 840 bgs (46,648 lbs) (American Marketer) Busan, 4/25.
ACETANILIDE Leyden Customs Expediters 320 bgs (35,626 lbs) (Hoegh Carrier) Bombay, 4/18.
ACETYL PARAMINOPHENOL Rhone Poulenc 360 dms (43,294 lbs) (Atlantic Service) Le Havre, 4/29.
ACID Three V Chemical 126 dms (38,889 lbs) (TFL Franklin) Bremerhaven, 5/5.
ACID TARTARIC Tartaric Chemicals 400 bgs (44,974 lbs) (Argonaut) Genoa, 5/5.
AGAR AGAR Chart 30 dms (3,638 lbs) (Japan Ambrose) Nagoya, 5/4.
ALCAPARRADO Goya Foods 2,344 cs (45,814 lbs) (Sea Land Leader) Algeciras, 5/6.
Goya Foods 2,348 cs (69,436 lbs) (Argonaut) Cadiz, 5/5.
ALKYL SULPHONIC ACID HARDENER Pioneer Plastics 4 dms (1,940 lbs) (Dart Altantica) Bremerhaven, 5/6.
ALUMINUM NITRATE 9 HYDRATE Order 40 dms (4,620 lbs) (TFL Franklin) Bremerhaven, 5/5.
ALUMINUM OXIDE Norton 115 m/x (78,759 lbs) (Dart Atlantica) Bremerhaven, 5/6.
AMINO 5 NITROBENZOIC ACID Janel Intl Fwdrs 227 pkg (25,163 lbs) (Stuttgart Express) Rotterdam, 4/29.
ANILINE COLOR Order 325 dms (22,368 lbs) (Stuttgart Express) Greenock, 4/29.
ANILINE DYES Mobay Chemical 148 dms (15,421 lbs) (Stuttgart Express) Rotterdam, 4/29.
ANISE ESSENTIAL OIL John D Walsh 5 dms (2,425 lbs) (Italica) Valencia, 5/5.
o-ANISIDINE, PURE Janel Intl Fwdrs 91 dms (44,537 lbs) Stuttgart Express, Rotterdam, 4/29.
ANTIHALO DYE ACID VIOLET 520 PIN Order 20 dms (1,256 lbs) (TFL Franklin) Bremerhaven, 5/5.
BAYFERROX Leschaco 3,200 bgs (166,791 lbs) (Stuttgart Express) Rotterdam, 4/29.
BENZYL ALCOHOL FR Janel Intl Fwdrs 72 dms (34,603 lbs) (Stuttgart Express) Rotterdam, 4/29.
BENZYL BENZOATE Metro Oil & Chemical 39 dms (17,196 lbs) (E R Brussel) Rotterdam, 5/5.
BETA PINENE EL Scott 130 dms (58,248 lbs) (Italica) Cadiz, 5/5.
BISALLYL ETHER TETRABROMOBISPHEN Order 720 sks (40,706 lbs) (E R Brussel) Felixstowe, 5/5.
BURNT POWDERED Umber Order 800 bgs (39,653 lbs) (Stuttgart Express) Rotterdam, 4/29.
Smith Chemical 800 bgs (39,683 lbs) (Stuttgart Express) Rotterdam, 4/29.
BURNT UMBER Order 800 bgs (39,683 lbs) (Stuttgart Express) Rotterdamn, 4/29.
n-BUTYL ISOCYANATE Janel Intl Forwarders 32 dms (24,603 lbs) (Stuttgart Express) Rotterdam, 4/29.
BUTYL METHACRYLATE Surface Air Intl 1 tnk (39,416 lbs) (ER Brussel) Felixstowe, 5/5.

C-E

CALCIUM CHLORIDE 2 HYDRATE Order 16 dms (1,862 lbs) (TFL Franklin) Bremerhaven, 5/5.
CAPA 210 POLYCAPROLACTONE Interox America 78 dms (37,831 lbs) (E R Brussel) Felixstowe, 5/5.
CAROB POWDER, TOASTED Tic Gums 880 bgs (44,775 lbs) (Italica Valencia, 5/5.
CASEIN Adamba Imports Intl 800 bgs (88,184 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5.
CATALYST SILICONAS Dow Corning 27 pls (1,301 lbs) (Riverdale) La Guaira 4/20.
CAUSTIC POTASH SOLUTION OIL 1 bks (1,296,000 lbs) (Jo Lind) Grangemouth, 5/4.
CERAMIC COLORS PULVERIZED Degussa 15 mix (1,082 lbs) (E R Brussel) Bremen, 5/5.
CERES RED ANILINE DYES Mobay Chemical 39 dms (2,068 lbs) (Atlantic Service) Rotterdam, 4/29.
CHALK POWDER HW St John 730 bgs (77,161 lbs) (E R Brussel) Felixstowe, 5/5.
CHLORODIFLUOROMETHANE Order 1 con (35,582 lbs) (Stuttgart Express) Greenock, 4/29.
Kali Chemie 2 tnk (79,366 lbs) (Italica) Barcelona, 5/5.
CINNAMIC ALDEHYDE Metro Oil & Chemical 39 dms (17,198 lbs) (E R Brussel) Rotterdam, 5/5.
CINNAMON LEAF OIL Madallion Intl 5 dms (2,425 lbs0 (Hoegh Carrier) Colombo, 4/18.
CITRIC ACID ANHYDROUS Order 1,980 bgs (203,705 lbs) (E R Brussel) Antwerp, 5/5.
CITROPAL BASE Votainer Consolidation Service 4 dms (1,772 lbs) (E R Brussel) Bremen, 5/5.
CLOVE OIL John D Walsh 10 ctn (5,822 lbs) (Japan Ambrose) Tokyo, 5/4.
Order of Shipper 23 dms (12,068 lbs) (Japan Ambrose) Tokyo, 5/4.
Polarome Mfg 5 dms (2,679 lbs) (Japan Ambrose) Tokyo, 5/4.
COAL TAR DYES Basf Inmont 44 bxs (36,666 lkbs) (Jadran Express) Genoa, 4/126.
COAL TAR DYES FAST SCARLET Ampack 20 dms (3,986 lbs) (Hoegh Carrier) Bombay, 4/18.
COALTAR DYES TURQUOISE BLUE Jecass 80 dms (9,738 lbs) (Hoegh Carrier) Bombay, 4/18.
COALTAR & DYE MALONONITRILE Lonza 12 dms (5,952 lbs) (Stuttgart Express) Bremerhaven, 4/29.
COALTAR NAVILENE BLUE DYE Alba Fwdg 25 dms (6,7655 lbs) (Hoegh Carrier) Bombay, 4/18.
COCONUT OIL Order of Shipper 4 bks (4,538,000 lbs) (Exporter) Cebu, 5/4.
2 bks (1,713,600 lbs) (Exporter) Davao, 5/4.
COLOR FORMER Mitsui 10 dms (2,161 lbs) (Japan Ambrose) Tokyo, 5/4.
CREAM OF TARTAR POWDER Tartaric Chemicals 440 bgs (44,974 lbs) (Argonaut) Genoa, 5/5.
CRUDE PALM OIL NON HAZARDOUS Welch Holme & Clark 1 tnk (44,092 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
CYANURIC CHLORIDE Lonza 640 dms (80,142 lbs) (Stuttgart Express) Bremerhaven, 4/29.
CYCLOHEXYLAMINE Order 1 tnk (39,727 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
DEXTROSE MONOHYDRATE STANDARD Roquette 1,680 bgs (169,543 lbs) (Jadran Express) Genoa, 4/16.
o-DIANISIDINE DIHYDROCHLORIDE Dunlap Alpers & Mott 260 dms (42,928 lbs) ??????
DIZAZINE ORANGE Order 10 dms (1,213 lbs) (Dart Atlantica) Felixstowe, 5/6.
DICHLORODIFLUOROMETHANE Kali Chemie 1 tnk (41,687 lbs) (Italica) Barcelona, 5/5.
Order 1 con (36,111 lbs) (Stuttgart Express) Greenock, 4/29.
DIETHYLAMINOBENZALDEHYDE Order 78 dms (19,639 lbs0 (Atlantic Service) Rotterdam, 4/29.
DIMETHOATE TECHNICAL Order 115 dms (42,340 lbs) (Sea Land Leader) Algeciras, 5/6.
DIMETHYL BENZYL CARBINYL BUTYRAT Order 6 dms (2,112 lbs) (Japan Ambrose) Kobe, 5/4.
DIOCTYLTINNOXIDE Thorson Chemical 60 dms (19,224 lbs) (E R Brussel) Antwerp, 5/5.
DIPHENYLMETHAN44DIISOCYANATE IMC Royal Athletic Ind 40 dms (21,164 lbs) (E R Brussel) Antwerp, 5/5.
DISODIUM-5-INOSINATE & GUASNYLATE AJINOMOTO 1200 ctn (2,646 lbs) (Japan Ambrose) Tokyo, 5/4.
DYE INTERMEDIATES John F Kilroy 75 dms (36,045 lbs) (Dart Atlantica) Le Havre 5/6.
EPSOM SALTS Potash Import & Chemical 800 bgs (82,646 lbs) (TFL Franklin) Bremerhaven, 5/5.
ETHYLENE GLYCOL DIACETATE BP Chemical Americas 40 dms (22,046 lbs) (E R Brussel) Felixstowe, 5/5.
ETHYLENETHIOUREA OIL Kallen Ind 40 bgs (2,240 lbs) E R Brussel) Bremen, 5/5.

F-M

FATTY ACID Henkel 1 con (43,431 lbs) (E R Brussel) Rotterdam, 5/5.
Henkel 1 tnk (43,122 lbs) (E R Brussel) Bremen, 5/5.
FATTY ALCOHOL Amato Agency 620 bgs (26,482 lbs) (Bakkafoss) Rotterdam, 5/5.
Henkel 152 dms (34,013 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
FLUOROBENZENE Order 25 dms (12,235 lbs) (TFL Franklin) Bremerhaven, 5/5.
FORMALDEHYDE RESIN Donex 36 plt (46,255 lbs) (Sea Land LEader) Algeciras, 5/6.
GELATIN, TECH 350 Olympic Adhesive 680 bgs (38,728 lbs) (Japan Ambrose, Kobe, 5/4.
GELATIN Blue Anchor 54 dms (12,932 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
Trans World Shpg 639 bgs (35,924 lbs) (Act 5) Sydney, 4/15.
GINSENG Achema 100 bgs (11,354 lbs) (Hoegh Carrier) Bombay, 4/18.
GLUE Anker Labelers 9 dms (1,493 lbs) (Stuttgart Express) Rotterdam, 4/29.
GRAPHITE PRODUCTS & ACCESSORIES Nippon Carbon 68 crt (227,131 lbs) (Japan Ambrose) Tokyo, 5/4.
GUM DAMAR BATU S Winterbourne 196 bgs (32,339 lbs) (Japan Ambrose) Tokyo, 5/4.
GUM KARAYA Colony Imports & Exports 200 bgs (36,067 lbs) (Hoegh Carrier) Bombay, 4/18.
Tic Gums 117 bgs (22,441 lbs) (Hoegh Carrier) Bombay, 4/18.
GUM ROSIN WW Grade Order 840 bgs (46,297 lbs) (TFL Franklin) Rotterdam, 5/5.
HO HELIUM REFRIGERATED LIQUID Order 1 tnk (37,853 lbs0 (Stuttgart Express) Greenock, 4/29.
HD OCENOL Henkel 152 dms (62,999 lbs) (Stuttgart express) Rotterdam, 4/29.
HARDENER FOR ARTIFICIAL RESIN Ciba Geigy 74 pkg (35,058 lbs) (Atlantic Service) Le Havre, 4/29.
HEXYLENE GLYCOL BP Oil 2 tnk (93,740 lbs) (ER Brussel) Felixstowe, 5/5.
HEPTANOIC ACID Order 1 bks (2,320,405 lbs) Jo Lind) Grangemouth, 5/4.
HEPTILIC ALDEHYDE OENANTHOL Millaster Onyx Group 1 tnk (32,761 lbs) (Sea Land Leader) Algeciras, 5/6.
2-HYDROXY ETHYL METHACRYLATE BP Chem Americas 40 dms (18,695 lbs) (ER Brussel, Felixstowe, 5/5.
HYDROXYMETHYLTRIAZAINDOLIZINE Order 10 dms (1,168 lbs) (TFL Franklin) Bremerhaven, 5/5.
ICHTHAMMOL USP XXX Panalpina 25 dms (12,125 lbs) (TFL Franklin) Bremehaven, 5/5.
INCOLUBLE SULPHUR Order 85 bgs (3,089 lbs) (Japan Ambrose) Kobe, 5/4.
INDIAN GUM OLIBANUM LD Maharaj 20 cs (2,469 lbs) (Sea Land Adventur) Algeciras, 4/30.
ISOBUTYRIC ACID Order 78 dms (36,111 lbs) (TFL Franklin) Rotterdam, 5/5.
ISOPHYTOL Order 1 tnk (35,759 lbs) (Atlantic Service) Rotterdam, 4/29.
ITACONIC ACID Order 720 bgs (40,479 lbs) (ER Brussel) Rotterdam, 5/5.
JAPAN WAX, GENUINE Order 75 ctn (8,598 lbs) (Japan Ambrose) Kobe, 5/4.
KOLA NUTS, DRY D Steengrafe 667 bgs (89,654 lbs) (Agborville) Abidjan, 4/22.
KURMURA Deep Foods 201 bgs (4,431 lbs) (Hoegh Carrier) Bombay, 4/18.
LAMINATES PHENOLIC MELAMINE Oliner Fibre 14 plt (28,605 lbs) (Hoegh Carrier) Bombay, 4/18.
LIME OIL Order 10 dms (4,381 lbs) (Tana) Abidjan, 4/24.
LINALOL SYNTHETIC Order 79 dms (33,614 lbs) (Atlantic Service) Le Havre, 4/29.
LINALYL ACETATE Order 79 dms (33,614 lbs) (Atlantic Service) Le Havre, 4/29.
LOCUST BEAN GUM PL Thomas 220 bgs (11,204 lbs) (Argonaut) Genoa, 5/5.
LONA FAST TURQUOISE BLUE RBL Delel 60 dms (1,204 lbs) (Hoegh Carrier0 Bombay, 4/18.
MAGNESIUM POWDER Hart Metals 24 dms (6,254 lbs) (Dart Atlantica) Felixstowe, 5/6.
MARINE LIPID CONCENTRATE Alltransport 5 pkg (2,293 lbs) (Dart Atlantica) Bremerhaven, 5/6.
MENTA PULEGI Harbarium 32 bgs (1,792 lbs) (Jadran Express) Rijeka, 4/16.
MICRONIZED BURNT UMBER Order 2,400 bgs (119,049 lbs) (Stuttgart Express) Rotterdam, 4/29.
MOLYBDATE ORANGE Harold Pepper 400 pkg (20,834 lbs) (Japan Ambrose) Tokyo, 5/4.
MOROCCAN CORIANDER SEEDS Order 360 bgs (39,683 lbs) (Argonaut) Casablanca, 5/5.

N-R

NAFTOCIT ZMBT Watt Terminal Warehouse 600 bgs (26,852 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5.
NIACINAMIDE Lonza 300 dms (36,045 lbs) (Stut6tgart Express) Bremerhaven, 4/29.
NN-DIMETHYLANILINE Order 90 dms (43,165 lbs) (ER Brussel) Antwerp, 5/5.
NUTMEG OIL Fritzsche Dodge & Olcott 24 dms (9,954 lbs) (Hoegh Carrier) Padang, 4/16.
OLEORESIN BLACK PEPPER Order 21 dms (3,089 lbs) (Hoegh Carrier) Cochin, 4/18.
OLEORESIN CELERY Order 11 dms (4,870 lbs) (Hoegh Carrier0 Cochin, 4/18.
OLIVE OIL Berio Imports 19,741 cs (449,904 lbs) (Jadran Express) Leghorn, 4/16.
Joseph Rutigliano 900 dms (41,667 lbs) (Italica) Naples, 5/5.
L Della Cella 72 dms (34,762 lbs) (Italica) Cadiz, 5/5.
Rienzi & Son 1,410 crt (52,910 lbs) (Italica) Naples, 5/5.
Schroeder Frader 100 dms (48,281 lbs) (Italica) Naples, 5/5.
Triunfo Import & Export Food 100 crt (3,858 lbs) (Atlantic Service) Rotterdam, 4/29.
Gina Imports 1,000 cs (36,817 lbs) (Sea Land Adventure) Algeciras, 4/30.
OLIVE OIL, EXTRA VIRGIN Fara San Martino 1,025 ctn (46,100 lbs) (Italica) Naples, 5/5.
ORTHO NITRO CHLOROBENZOL Leschaco 1 tnk (41,579 lbs) (Atlantic Service) Bremerhaven, 4/29.
OXYTETRACYCLINE HYDROCHLORIDE Boehringer Ingelheim 40 dms (4,762 lbs) (Jadran Express) Rijeka, 4/16.
PALM KERNEL OIL Order of Shipper 2 bks (2,235,870 lbs) (Exporter) Pasir Gudang, 5/4.
PARAFFIN WAX Dura Commodities 720 bgs (40,873 lbs) (Dart Atlantica) Felixstowe, 5/6.
PARAFORMALDEHYDE TR America Chemicals 18 plt (41,032 lbs) (Sea Land Adventur) Algeciras, 4/30.
180 PEARL BONE GLUE Olympic Adhesive 346 bgs (38,903 lbs) (Japan Ambrose) Kobe, 5/4.
PEARL BONE GLUE, CHINESE Olympic Adhesive 346 bgs (38,903 lbs) (Japan Ambrose) Kobe, 5/4.
PENICILLIN FC Gerlach 1,277 ctn (67,426 lbs) (Stuttgart express) Greenock, 4/29.
PHENOL METHANE MCI 4 dms (1,940 lbs) (Dart Atlantica) Felixstowe, 5/6.
PHENOXY ACETIC ACID Bristol Myers 880 bgs (61,023 lbs) (Kazimierz Pulaski) Rotteram, 5/5.
PHENYL ACID Unimodal 80 kgs (9,348 lbs) (Dart Amtlantica) Felixstowe, 5/6.
PHORWITE REU UNCUT ANILINE DYES Mobay Chemical 30 dms (3,591 lbs) (Atlantic Service) Rotterdam, 4/29.
PIOLOFORM BL 18 Wacker Chemicals 275 bgs (12,428 lbs) (TFL Franklin) Bremerhaven, 5/5.
POLYCYCLOPENTADIENE RESIN UCC Products 24 brl (11,005 lbs) (Dart Atlantica) Felixstowe, 5/6.
POLYETHYLENE GLYCOL Order 500 bgs (23,302 lbs) (TFL Franklin) Bremerhaven, 5/5.
POLYTETRAFLUOROETHYLENE SYNTH RE Montedison 200 dms (11,684 lbs) (Jadran Express) Genoa, 4/16.
POLYVINYL ALCOHOL Marubeni America 80 pkg (85,010 lbs) (Japan Ambrose) Kobe, 5/4.
POTASSIUM CYANIDE GRAN SOLID Degussa 1,440 dms (158,290 lbs) (Stuttgart Express) Bremerhaven, 4/29.
POTASSIUM NITRATE ICC Ind 360 bgs (40,318 lbs) (Kazimierrz Pulaski) Bremerhaven, 5/5.
PROPYLENEDICHLORIDE DICHLOROPROP Leschaco 1 tnk (44,974 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
PROTEIN CONCENTRATE Trugman Nash 2,264 bgs (126,808 lbs) (Act 5) Melbourne, 4/15.
PSYLLIUM SEED HUSKS Order 475 bgs (43,982 lbs) (Hoegh Carrier) Bombay, 4/18.
PYRIDOXINE HYDROCLORIDE Order 20 dms (1,301 lbs) (Jadran Express) Rijeka, 4/16.

R-S

REFRIGERANT GAS Order 2 con (70,680 lbs) (Stuttgart Express) Greenock, 4/29.
REGROUND PTFE POWDER Mitsui 110 dms (25,706 lbs) (Japan Ambrose) Tokyo, 5/4.
ROCHE NIACIN USP FCCM Transcontainer Transports 900 dms (109,128 lbs) (Stuttgart Express) Bremerhaven, 4/29.
ROOF CEMENT Benson Hanson Mfg 2,025 pls (98,050 lbs) (Riverdale) La Guaira, 4/20.
ROSA CHLORIDE Order 30 dms (6,071 lbs) (Atlantic Service) Rotterdam, 4/29.
ROSEMARY K I Litster 19 bgs (2,388 lbs) (Sea Land Leader) Algeciras, 5/6.
SABUDANA India Bazaar 10 bgs (1,014 lbs) (Hoegh Carrier) Bombay, 4/18.
SACCHARIN SODIUM Silvey Shpg 320 pkg (37,919 lbs) (Japan Ambrose) Kobe, 5/4.
SALT Richter Brothers 898 pcs (40,172 lbs) (ER Brussel) Le Havre, 5/5.
SELENIUM DIOXIDE Alloychem 28 dms (2,405 lbs) (Stuttgart Express) Bremerhaven, 4/29.
SELENIUM PELLETS W POLYETHYLENE Alloychem 2 plt (2,399 lbs) (Japan Ambrose) Tokyo, 5/4.
SIPERNAT DIONY Nortrh American Silica 600 bgs (20,503 lbs) (Stutlgart Expres) Bremerhaven, 4/29.
SODIUM ALGINATE Kelco 800 sks (42,000 lbs) (Dart Atlantica) Felixstowe, 5/6.
SODIUM BENZOATE POWDER & FLAKE JM Rodgers 880 bgs (44,775 lbs) (ER Brussel) Rotterdam, 5/5.
SODIUM BROMATE Ameribrom 564 dms (116,122 lbs) (Argonaut) HAifa, 5/5.
SODIUM CYANIDE GRAN SOLID Degussa 200 dms (87,055 lbs) (Stuttgart Express) Bremerhaven, 4/29.
SODIUM FORMATE Kingsley & Keith 20 plt (45,592 lbs) (Sea Land Adventur) Algeciras, 4/30.
SODIUM GLUCONATE Atlantic Air Express 800 bgs (206,836 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
SODIUM METABISULPHITE Browning Chemical 360 bgs (39,382 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5.
SODIUM METASILICATE Browning Chemical 400 bgs (44,775 lbs) (Argonaut) Naples, 5/5.
SODIUM PERSULPHATE K&M Custom Brokers 720 bgs (39,642 lbs) (Stuttgart Express) Bremerhaven, 4/29.
SODIUM PRODUCTS OXIDIZING MATL Nachem 20 pkg (2,357 lbs) (Dart Atlantica) Bremerhaven, 5/6.
SODIUM SILICATE S&R Distr. 16 plt (33,842 lbs) (Riverdale) La Guaira, 4/20.
SORBITOL EM Ind 9 bxs (43,475 lbs) (TFL Franklin) Bremerhaven, 5/5.
STABIL HAROCHEM PDPE LEADPHTHALA American KK Chemical 1200 bgs (46,738 lbs) (ER Brussel) Rotterdam, 5/5.
SULFAMETHAZINE AJ Murray 180 dms (22,024 lbs) (Jadran Express) Rijeka, 4/16.
SULFAMETHAZINE Universal Transcontinental 320 dms (39,164 lbs) Jadran Express) Rijeka, 4/16.
SULFISOXAZOLE Gyma Laboratories 100 dms (12,236 lbs) (Jadran Express) Rijeka, 4/16.
SULPHUR HEXAFLUORIDE Montedison 165 cyl (39,032 lbs) (Jadran Express) Leghorn, 4/16.
SYNTHETIC COAL TAR DYES Jecass 70 dms (13,102 lbs) (Hoegh Carrier) Bombay, 4/18.
SYNTHETIC RESIN Arlington Warehouse 42 plt (42,048 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5.
Mobay Chemical 936 bgs (44,932 lbs) (TFL Franklin) Rotterdam, 5/5.
Montedison 400 dms (28,660 lbs) (Argonaut) Genoa, 5/5.
Woodstock Wire Works 1 plt (1,168 lbs) (Dart Atlantica) Felixstowe, 5/6.
SYNTHETIC RUBBER Enichem 32 pkg (89,177 lbs) (Sea Land Adventur) Algeciras, 4/30.
Montedison 140 pkg (245,198 lbs) (Sea Land Adventur) Algeciras, 4/30.
Order 32 bxs (79,145 lbs) (ER Brussel) Antwerp, 5/5.
SYNTHETIC RUBBER DUTRAL TER 038 Montedison 22 bxs (45,287 lbs) (Argonaut) Leghorn, 5/5.
SYNTHETIC RUBBER JSR Mitsui 480 bgs (44,092 lbs) (Sea Lad Adventur) Algeciras, 4/30.

T

TARTARIC ACID Joseph C Murray 432 bgs (44,603 lbs) (Argonaut) Barcelona 5/5.
TETRAPOTASSIU PYROPHOSPHATE Saf Customs Broker 720 bgs (79,952 lbs) (Bakkafoss) Rotterdam, 5/5.
TETRASODIUM PYROPHOSPHATE Saf Customs Broker 800 bgs (44,797 lbs) (Bakkafoss) Rotterdam, 5/5.
THIOGLYCOLIC ACID Rona Pearl 78 dms (44,795 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5.
THIOUREA DIOXIDE Degussa 120 dms (27,604 lbs) (Stuttgart Express, Bremerhaven, 4/29.
TITANIUM DIOXIDE Durr Marketing 1,600 bgs (80,248 lbs) (Sea L?and Adventur) Algeciras, 4/30.
TITANIUM DIOXIDE Leschaco 5,320 bgs (276,267 lbs) (Stuttgart Express) Rotterdam, 4/29.
NL Ind 6,400 bgs (331,575 lbs) (TFL Franklin) Rotterdam, 5/5.
Superior Materials 800 bgs (40,124 lbs) (Sea Land Adventur) Algeciras, 4/30.
Tioxide 720 bgs (41,072 lbs) (Sea Land Adventur) Algeciras, 4/30.
Finnlitan 720 bgs (39,361 lbs) (Kazimierz Pulaski) Bremerhaven, 5/5
TITANIUM DIXOIDE TITANOX NL Ind 3,500 bgs (181,328 lbs) (Atlantic Service) Rotterdam, 4/29.
900 bgs (139,882 lbs) (Kazimierz Pulaski) Rotterdam, 5/5.
WTC Air Freight 6,300 bgs (325,002 lbs) (Stuttgart Express) Bremerhaven, 4/29.
TMA FC Gerlach 35 kgs (2,515 lbs) (Stuttgart Express) Greenock, 4/29.
TRICHLOROTRIFLUOROMETHANE FORANE Order 1 tnk (39,683 lbs) (TFL Franklin) Rotterdam, 5/5.
TUNG OIL Amber 1 bks (330,690 lbs) (Jo Lind) Grangemouth, 5/4.
TURPENTINE Winsor & Newton 73 ctn (3,723 lbs) (Dart Atlantica) Felixstowe, 5/6.
ULTRAMARINE BLUE Hilton Davis Chemical 800 bgs (45,194 lbs) (TFL Franklin) Rotterdam, 5/5.
VEGETABLE CARBON, ACTIVATED American Norit 20 plt (40,697 lbs) (Stuttgart Express) Greenock, 4/29.
VINEGAR Berio Imports 420 cs (10,362 lbs) (Jadran Express) Leghorn, 4/16.
Patrick Powers 990 pkg (10,467 lbs) (Jadran Exprerss) Genoa, 4/16.
6 plt (17,199 lbs) (Jadran Express) Genoa, 4/16.
WAX Henkel 800 bgs (40,917 lbs) (TFL Franklin) Bremerhaven, 5/5.
WAXY CATIONIC STARCH National & Chemical 702 pkg (39,465 lbs) (Stuttgart Express) Greenock, 4/29.
XYLENE Royal Athletic Ind 20 dms (10,582 lbs) (ER Brussel) Antwerp, 5/5.
XYLENOL Rhenus Transport Intl 152 dms (74,727 lbs) (Bakkafoss) Rotterdam, 5/5.
2,4-XYLINDINE Leschaco 1 tnk (38,272 lbs) (ER Brussel) Antwerp, 5/5.

Grace to Open Lab At Washington Center

W. R. Grace & Co. last week opened a new 70,000-square-foot laboratory at its Washington Research Center headquartered in Columbia, Md. Construction of the two-story laboratory began in late 1984.

The new facility is part of an $8.5 million, 90,000-square-foot laboratory expansion, which includes a ceramics applications laboratory, new pilot and laboratory space for process development, and new homes for research efforts in biotechnology, catalysis and electrochemistry.

According to Dr. F. Peter Boer, president of Grace's Research Division, "This expansion reflects Grace's long-term commitment to expand its research efforts with the objective of both developing new product lines in high technology businesses and generating new products for Grace's existing specialty chemical operations."

The new facility will satisfy the Washington Research Center's R&D space requirements until the 1990's. Research at the center is primarily conducted for Grace's specialty chemicals units.

Their primary mission is to develop new business and investment options for Grace as well as to create new products that are compatible with existing businesses.

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

An index of weekly chemical market reports is on the back cover.

A

Abies siberica oil, cns. ... lb.	15.00	-
Acetaldehyde, 99%, tanks, frt. alld. lb.	.37	-
Prices 1c. higher in West.		
Acetaminophen (see N-Acetyl-p-aminophenol)		
Acetanilide, tech, flaked, bgs, t.l., f.o.b. works ... lb.	1.29	-
Acetic acid, tech., tanks, dlvd. E ... lb.	.25	-
Acetic anhydride, tanks, dlvd. E ... lb.	.43½	-
Acetic anhydride prices 1c. higher in West.		
Acetoacetanilide, dms., t.l., dlvd. .. lb.	1.29	-
Acetoacet-o-anisidide, dms., t.l., dlvd. ... lb.	2.70	-
Acetoacet-o-chloroanilide, dms., t.l., dlvd. ... lb.	2.85	-
Acetoacet-o-toluidide, dms., t.l., dlvd. ... lb.	1.58	-
Acetoacet-m-xylidide, dms., t.l., dlvd. ... lb.	3.33	-
Acetone, tanks, dlvd. E. ... lb.	.25	-
dlvd. Zone 2 (Calif.) ... lb.	.27	-
dlvd. Zone 3 (W. of Rockies excluding Calif.) ... lb.	.27	-
Acetonitrile, tanks, frt. alld. ... lb.	.53	.54½
Acetophenetidin (see Phenacetin).		
Acetophenone, tech., tanks, f.o.b. works ... lb.	.78	.85
perfume grade, extra cns. ... lb.	2.15	-
N-Acetyl-p-aminophenol, c.l., t.l. works ... kilo	5.95	6.64
Acetylene black, imp., 50% compressed, 12½-lb. bgs. c.l., t.l. frt. extra ... lb.	.98	-
100%, 25-lb. bgs., same basis ... lb.	.95½	-
Acetylene tetrabromide, tanks, f.o.b. works ... lb.	.97	-
Acetylsalicylic acid, USP (see Aspirin).		
Acetyltributyl citrate, bulk, f.o.b. works ... lb.	1.28	-
Acetyltriethyl citrate, bulk, f.o.b. works ... lb.	2.08	-
Acrolein, tech., tanks, works ... lb.	.82	-
Acrylamide, solid, t.l. works ... lb.	1.00	-
soln., 100% basis tanks, works. . lb.	.74	.77
Acrylic acid, glacial, reg., tanks, dlvd. ... lb.	.67	-
tech., tanks, frt. alld. ... lb.	.60	-
Acrylonitrile, tanks, works ... lb.	.39½	.45½
Acrylonitrile-butadiene-styrene resin, high-impact, nat., t.l., dms., dlvd. ... lb.	1.05	1.09
medium-impact, nat., same basis lb.	.94	.98
low-impact, nat., same basis ... lb.	.75	-
Adipic acid, resin grade, bulk, hopper cars, frt. equald. ... lb.	.57	-
bgs., t.l., c.l. frt. equald. ... lb.	.59	-
Agar USP, powd., 60 to 100 mesh., dms. ... lb	9.50	-
Alcohol, syn. C-8 to C-10, tanks, f.o.b. works ... lb	.38	-
C-12 to C-13, tanks, dlvd. ... lb.	.57	.59
C-14 to C-15, tanks, dlvd. ... lb.	.57	-
C-16 to C-18, tanks, dlvd. ... lb.	.80	-
Aldehyde, C-6, dms. ... lb.	4.10	5.70
C-7, dms. ... lb.	1.95	-
C-8, dms. ... lb.	4.30	6.30
C-10 dms. ... lb.	4.30	5.35
Algin (see Sodium alginate.)		
Alkali blue, dry, flushed, 110-lb. dms., dlvd ... lb.	3.72	3.83
Alkali blue prices 1c. higher W. of Rockies.		
Allspice Guatemalan / Honduran, bgs ... lb.	1.00	-
Jamaican, bgs. ... lb.	1.05	-
Allyl alcohol, tanks, f.o.b., Bayport, Tex. ... lb.	.90	-
Allyl bromide, 500-kilo dms. 2,000 lbs. or more, works ... lb.	5.50	-
Allyl caproate, 25-lb. cns. ... lb.	3.90	4.50
Allyl chloride, tanks, f.o.b. works. . . lb.	.65	-
Allyl isothiocyanate, bots. ... lb.	5.40	6.90
Almond oil, artif., bitter (see Benzaldehyde.)		
Almond oil, nat. bitter, NF f.f.p.a. bots. ... lb.	3.50	3.60
sweet ... lb.	1.24	1.50
Aloe, Cape, cs. ... lb.	2.00	-
powd., cs. ... lb.	2.25	2.75
Curacao, kgs. ... lb.	2.60	-
powd., kgs. ... lb.	3.00	-
Aloin, NF, dms ... lb	8.00	8.70
Alum, ammonium, tech. gran., bgs., c.l., t.l., works ... 100 lb.	35.00	-
FCC powd., fiber dms., works 100 lbs.	55.00	-
Alum, potassium, tech. gran. bgs., c.l., t.l., works ... 100 lbs.	35.00	-
FCC powd. fiber dms., works . 100 lbs.	55.00	-
Alumina, activated, gran., 100-lb. bgs., 40,000-lb. min. c.l., works. ton	821.00	-
calcined, bulk, same basis ... ton	354.00	-
100-lb. bgs., same basis ... ton	360.00	-
hydrated, white, bulk, same basis ... ton	190.00	-
100-lb. bgs., same basis ... ton	224.00	-
Aluminum acetate, basic, dms., l.c.l., works ... lb.	3.25	-
Aluminum chloride, anhyd., soln., 500-600 lb. dms., c.l., t.l., works, frt. equald. ... lb.	.50	.55
bulk, same basis ... lb.	.45½	.49½
semi-bulk bins, same basis ... lb.	.48	.53
Aluminum chloride, coml., soln., 32° tanks, works ... 100 lbs.	15.00	-
ret. dms., c.l., works ... 100 lbs.	12.00	-
non-ret. dms., same basis . 100 lbs.	20.00	-
Aluminum formate, dibasic, liq. 8% Al_2O_3 t.l., works ... lb.	.55	-
Aluminum hydrate (see Alumina, hydrated)		
Aluminum hydroxide, dried, gel, NF, 75-lb. dms., c.l., t.l., works. lb.	2.75	3.50
Aluminum metal, 99½% or more, 50-lb. pigs., 30,000-lb. lots, frt. alld. ... lb.	.76	-
Aluminum oxide amorphous (see Alumina, calcined).		
Aluminum paste, leafing grade, std., lining, 2,400 lb. lots, dlvd. ... lb.	1.40	-
lining, extra-fine, same basis ... lb.	1.99	2.14
Aluminum phenolsulfonate, purif., 100-kilo dms., t.l. ... kilo	6.48	-
Aluminum powder, leafing grade, std. lining, 2,400 lb. lots, dlvd. . lb.	3.17	-
extra fine, lining, same basis ... lb.	4.04	-
Aluminum stearate, bgs., c.l. ... lb.	1.25	1.37
Aluminum sulfate, coml., grd., 100 lb. bgs., c.l., works, frt. equald., basis 17% Al_2O_3 East and Gulf Coasts ... ton	185.00	-
West Coast ... ton	217.80	-
liq., tanks, N.E. same basis ... ton	145.00	-
iron-free, dry, bgs., c.l. same basis ... ton	300.00	-
liq., tanks, same basis ... ton	225.00	265.00
Aluminum sulfate, USP, gran., dms. lb.	-	.337
Aminoacetic acid, USP, dms., 20,000 lbs., f.o.b. works ... lb.	2.12	-
tech., t.l., same basis ... lb.	1.88	-
p-Aminobenzoic acid, 1,000 kilos or more, dms., f.o.b. works . kilo	9.60	10.10
2-Amino-4-chlorophenol dry and grd., 14,000 lbs. or more, frt. alld. lb.	5.79	-
Aminoethyl ethanolamine, tanks, frt. collect ... lb.	1.33½	-
N-Aminoethyl piperazine, tanks, f.o.b., frt. collect ... lb.	1.05	-
2-Amino-2-ethyl-1,3-propanediol dms., t.l. f.o.b. works ... lb.	1.82	-
2-Amino-2-methyl-1-propanol, 95%, dms., c.l., t.l., f.o.b. works . lb.	.95	-
tanks, f.o.b. works ... lb.	.89	-
o-Aminophenol, dms., f.o.b. Charlotte, N.C. ... lb.	3.95	-
p-Aminophenol, t.l. dms., f.o.b. Raleigh, N.C. ... kilo	7.15	-
p-Aminosalicylic acid, USP, 50-kilo dms., t.l. ... kilo	18.50	-
Ammonia, anhyd., fertilizer, wholesale, tanks, dlvd. Midwest terminals ... ton	165.00	170.00
tankcars, f.o.b. Gulf Coast ... ton	90.00	95.00
aqueous, 29.4% NH_3, anhyd. basis, tanks, frt. equald. E. of Rockies ... ton	260.00	315.00
Ammoniacal liquor (see Ammonia, aqueous).		
Ammoniac sal, galvanizing grade, bgs., c.l., f.o.b. works ... 100 lbs	28.60	-
Ammoniac sal. white (see Ammonium chloride coml.).		
Ammonium biborate, gran., dms., c.l. works ... lb.	.90	-
Ammonium biborate powder 15c. per lb. higher.		
Ammonium bicarbonate, 300-lb. fib. dms., c.l., works ... 100 lbs.	26.00	-
bgs., c.l. ... 100 lbs.	25.00	-
Ammonium bichromate, photo-litho grade, gran. 100-lb. dms., l.t.l. works ... lb.	2.00	-
Ammonium bifluoride, bgs., t.l., works ... lb.	.70	-
Ammonium bromide, dom. NF, gran., dms., c.l., t.l., f.o.b. works . lb.	1.31	-
Ammonium chloride, white, tech., fine gran., bgs., c.l., works ... 100 lbs.	18.00	-
USP, gran., dms. ... lb.	.40	.53
Ammonium citrate, dibasic, 250-lb. dms. f.o.b. works ... lb.	2.79	-
Ammonium dimolybdate, approx. 65%, 24,000 lbs. or more . lb.	5.48	-
Ammonium fluoborate, tech., dms., c.l., t.l., works, frt. equald. . lb.	1.79	-
Ammonium heptamolybdate, cryst., dms., 24,000 lbs. f.o.b. works ... lb.	5.57	-
Ammonium lauryl sulfate, tanks, f.o.b. works ... lb.	.29	.32
Ammonium lignin, sulfonate, bulk, f.o.b. Hoquiam, Ore. ... ton	72.00	-
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bulk, S.E. dlvd. ... ton	150.00	155.00
Ammonium oxalate, tech., fine, gran. 300-lb. dms., t.l., f.o.b. works ... lb.	1.42	1.66
Ammonium pentaborate gran. bgs., c.l., works ... lb.	.75	-
Ammonium pentaborate powder 20c. per lb. higher.		
Ammonium persulfate, 225-lb. dms, 24,000 lbs. or more, f.o.b. works ... lb.	.58	-
55-lb. bgs., same basis ... lb.	.56½	-
Ammonium phosphate (see Di- and monoammonium phosphates).		
Ammonium silicofluoride, dms. c.l., t.l., works ... lb.	.30½	-
Ammonium sulfate, lg. gran., bulk, c.l., works ... ton	74.00	79.00
std., coml., bulk, f.o.b. works .. ton	73.00	-
tech., bgs., c.l., t.l., works ... ton	108.00	120.00
Ammonium sulfide, liq., 40-44% tanks, 100% basis, frt. equald. . ton.	460.00	-
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).		
Ammonium thiocyanate, tech., cryst., bgs., c.l., works ... lb.	1.02	-
tech soln., 50%, tanks, frt. equald., ... lb.	.93	-
Ammonium thiosulfate, photographic, 60%, tanks, f.o.b. works . . lb.	.13	-
Ammonium zirconyl carbonate, soln., bulk ... lb.	.72	-
Amyl acetate, primary mixed isomers, tanks, dlvd. ... lb.	.57	-
Amyl alcohol, primary mixed isomers, tanks, frt. alld. ... lb.	.46½	-
Amyl cinnamic aldehyde, dms. ... lb.	2.35	2.50
p-tert-Amylphenol, bulk, works ... lb.	.91	1.03
Amyris oil, dms. ... lb.	11.50	12.25
Anethole, tech., dms ... kilo	10.20	-
USP, dms. ... lb.		4.00
Angelica root oil, bots. ... kilo	700.00	-
Aniline, tanks, f.o.b. ... lb.	.40	.42
Anise oil, dms. ... kilo	11.75	-
Anise seed, Egypt, bgs ... lb	.63	-
Spanish, bgs. ... lb.	.94	.97
Turkish, bgs ... lb.	.62	.60
Anisic aldehyde, cns., dms ... lb.	4.80	5.40
o-Anisidine, imp., dms., dlvd ... lb	2.27	-
p-Anisidine, imp., cast solid, dms., works ... lb	1.90	-
flakes, same basis ... lb.	2.25	-
Anthranilic acid, purif., 99% min., dms., t.l., frt. alld. ... lb	1.70	-
Antimony fluoborate, liq. conc., 175-lb dms., t.l., works. ... lb	3.02	-
Antimony metal bulk, c.l., mines lb.	1.29	1.35
Antimony oxide, high-tint, bgs., c.l., frt alld. E. of Rockies ... lb	1.50	1.60
Antimony trichloride, anhyd., solid, dms., t.l. works ... lb	3.60	-
Apomorphine hydrochloride, NF, bots., ... gm	15.00	-
Apricot kernel oil, dms ... lb	2.05	-
Arabic gum, powd., bbls ... lb	1.85	2.15
spray dried ... lb	2.00	2.50
USP grade ... lb	6.75	9.25
Aromatic petroleum solvents (see Solvent, naphtha, petroleum, aromatic)		
Arsenic, crude (see Arsenious trioxide).		
Arylid, red (see Naphthol, arylid red).		
Arsenious trioxide, crude, 95%, bulk, c.l., f.o.b. Tacoma, Wash ton	800.00	-
Asbestine (see Talc, fibrous).		
Ascorbic acid, USP, 100 kilos, dlvd. ... kilo	9.00	10.50
Ash, black (see Barium sulfide).		
Asphalt gilsonite, (see Gilsonite).		
Asphalt petroleum cutback, tanks, E. Coast. ... gal	.86	-
emulsion, tanks, tankwagons, E. Coast ... gal	.68	-
steam-refined, 40-300 penetration, tanks, tankwagon ... ton	170.00	-
steep roofing grade, bulk tankwagon ... ton	175.00	-
Aspirin, USP, cryst., powd., 250-lb. dms., c.l., f.o.b. ... lb.	1.95	-
10% starch granulation, white, 250-lb. dm, c.l., f.o.b. ... lb.	1.97	-
16% starch granulation, white, same basis ... lb.	2.80	-
Freight equald. shipt. identical quantity over standard routes from N.Y., Phila., Midland, Mich., Chicago and St Louis.		
Atropine sulfate, USP, bots ... oz	10.00	11.00
Avocado oil, dms. ... lb.	4.00	4.50
Azelaic acid, tech., 50-lb. bgs., t.l., c.l., dlvd. ... lb.	1.23	-
Azo orange, bbls., dlvd. ... lb	4.60	-
Azo yellow, 10 G, bgs., dlvd. E of Rockies ... lb	4.40	-
Azo G yellow pigment, bgs., same basis ... lb.	2.45	-

B

Bacitracin, USP, non-sterile, one billion units or more ... million units	8.30	8.80
Barbital, NF, 50-kilo dms., dlvd. .. kilo	22.50	-
Barbital-sodium, NF, 50-kilo dms. dlvd ... kilo	23.00	-
Barite, dry-grd., Southern, off-color, coarse, bgs., c.l., f.o.b. mines lb	.09	.11
water-grd., white, bgs., c.l., f.o.b. works ... lb	.13	-
unbleached, extra-fine, pigment grade, c.l., f.o.b. works ... ton	180.00	-
Barium carbonate, precip., bulk, c.l., works, frt. equald ... lb.	.25	-
bgs., same basis ... lb.	.25½	-
photo grade, bgs., same basis ton	510.00	-
Barium chlorate, 100 lb. dms., t-10 dm. lots, works ... lb	1.04	-
Barium chloride, tech., cryst., bgs., c.l., works ... ton	470.00	-
anhyd. drums c.l., same basis ton	590.00	-
Barium chloride, purif., cryst. 400 lb. dms., works ... lb.	3.70	-
Barium monohydrate, 55 lb. bgs., c.l., t.l. f.o.b. works ... 100 lbs	48.00	-
octahydrate, cryst., bgs., same basis ... 100 lbs.	33.00	-
Barium nitrate, 100 lb. bgs., t.l., works ... 100 lbs.	32.50	-
Barium oxide, grd., dms., c.l., dlvd. ... 100 lbs.	31.25	-
tote bins, same basis, .. 100 lbs.	30.00	-
Barium peroxide, 700-lb. dms., c.l., t.l., works ... lb.	.30	-
Barium stearate, bulk, t.l., f.o.b. dest. ... lb.	1.05	-
Barium sulfate, tech. (see Barite and Blanc fixe).		
Barium sulfate, USP, X-ray diagnosis grade, powd., 25 kilo bgs., 10,000 kilo lots ... lb.	.58½	-
Barium sulfide (black ash), dms., c.l., works ... ton	460.00	-
Basil Egyptian ... lb.	.75	.85
French ... lb.	.88	.90
Basil oil, Comores ... lb.	90.00	-
Basil oil, Grand Vert ... lb.	45.00	-
Battery acid, t.l., f.o.b., works ... ton	52.00	70.75
Bauxite, calcined, refractory grade, 87¾-88% Al_2O_3, Baltimore & Mobile ... metric-ton	229.28	-
Bay oil, NF, 55-60%, dms. ... lb.	10.50	15.00
Bayberry wax, bgs. ... lb.	2.70	3.00
Beeswax, refd., bleached white, bricks, 100-lb. ctns. ... lb.	3.10	3.20
white, slabs, 100-lb. ctns. ... lb.	3.05	3.10
yellow, bricks, 100-lb. ctns. ... lb.	3.00	3.10
yellow, slabs, 100-lb. ctns. ... lb.	2.95	3.05
Bentonite, dom., c.l. bags, f.o.b. works ... ton	43.50	-
Benzaldehyde, NF, dms. ... lb.	1.25	-
tech., dms., c.l., t.l. ... lb.	.73	.83
Prices are 4c. per lb. higher West of the Rockies.		
Benzene, indust. or nitration, barges, f.o.b.		
Baton Rouge, La. ... gal.	.90	-
Baytown, Tex. ... gal.	.90	-
Beaumont, Tex. ... gal.	.90	-
Catlettsburg, Ky. ... gal.	.90	-
Chicago district ... gal.	.90	-
Chocolate Bayou, Tex. ... gal.	.90	-
Clairton, Pa. ... gal.	.90	-
Corpus Christi, Tex. ... gal.	.90	-
Deer Park, Tex. ... gal.	.90	-
Houston district, spot ... gal.	.82	.86
Wood River, Ill. ... gal.	.90	-
Benzene hexachloride, 99% gamma isomer (see Lindane).		
Benzidine orange, powd., bgs., dlvd. lb.	4.90	6.70
liq., containers, dlvd. ... lb.	3.36	3.89
Benzidine yellow, AAA, bgs., dlvd. . lb.	5.80	6.05
AAOA, bgs., dlvd. ... lb.	7.35	7.40
AAOT, bgs., dlvd. ... lb.	5.95	6.20
Benzocaine, USP, dms., 1,000 kg. lots, f.o.b., works ... kg.	10.00	11.50
Benzodihydropyrone, dms. ... lb.	12.50	-
Benzoic acid, tech., bgs., c.l., t.l., f.o.b. works ... lb.	.55	.58
USP cryst., dms., ton lots same basis ... lb.	1.73	1.75
Benzoin gum, Sumatra, cs. ... lb.	1.80	-
Benzophenone, N.F., 1,000 lbs. or more, f.o.b. ... lb.	3.50	3.60
N.F., 1,000 kilos or more, f.o.b. ... kg.	7.45	-
tech, 1,000 kilos or more, fob works ... kgs.	4.35	-
2,2,-Benzothiazyl disulfide (see Mercaptobenzothiazyl disulfide).		
Benzotriazole, flake, dms., 1,000 lbs. or more, f.o.b. works ... lb.	6.10	-
powd., dms., 1,000 lbs. or more, same basis ... lb.	6.20	-
photo-grade, dms., 1,000 lbs. or more, same basis ... lb.	9.90	-
Benzotrichloride, refd., dms. t.l., frt. equald ... lb.	.87	-
tanks, frt. equald ... lb	.80	-
Benzoyl chloride dms., c.l., works lb.	.63½	-
tanks, frt. equald. ... lb.	.74½	.75
Benzoyl peroxide, regular gran., 10,000-lb. lots or more, bgs., works, frt. equald. ... lb.	2.35	6.98
paste, 50% and 55% formulations, dms., pails, frt. equald. ... lb.	1.71	1.95
Benzyl acetate, dms. ... lb.	1.20	2.60
Benzyl alcohol, N.F. t.l. dms. frt. equald ... lb.	1.26	1.85
tanks, same basis ...	1.37	1.43
photo grade, t.l., dms., same basis ... lb.	1.40	-
tanks, same basis ...	1.34	-
tech. grade, t.l., dms., same basis lb.	1.32	-
tanks, same basis ...	1.26	-
Benzyl benzoate, dms. ... lb.	1.65	2.25
Benzyl chloride, tech., non-ret. dms., c.l., t.l., frt. equald. ... lb.	.59	-
tanks, f.o.b. ... lb.	.54	-
Benzyl cinnamate, 25-lb. cns. ... lb.	8.50	9.95
n-Benzyl-N,N-dimethylamine, t.l., dms., f.o.b. works ... lb.	2.30	-
Benzyl formate, dms. ... lb.	10.50	-
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).		
Benzyl isoeugenol, dms. ... lb.	15.50	-
Benzyl propionate, dms. ... lb.	3.35	-
Benzyl salicylate ... lb.	2.90	3.25
Benzylidine acetone, cns., bots. ... lb.	2.95	3.25
Bergamot oil, nat., Italian, f.o.b. .. kilo	40.00	-
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).		
Biotin, cryst., 500 gms. or more ... gm.	5.50	-
Biphenyl (see Diphenyl).		
Bismuth nitrate, purif. cryst., 100-lb. dms., frt. equald. ... lb.	10.00	-
Bismuth oxychloride, 100-lb. dms., works ... lb.	17.20	-
Bismuth subcarbonate, USP, medium powd., 225-lb. dms., works. lb.	15.31	15.50
Bismuth subgallate, purif., 100-lb. dms., works ... lb.	10.50	-
Bismuth subnitrate NF, powd., 200-lb. dms., works ... lb.	14.45	-
Bismuth subsalicylate, purif. powd., 50-100 lb. dms., works ... lb.	17.00	-
Bismuth trioxide, reagent. powd., 100-lb. dms., works ... lb.	15.00	15.45
Bisphenol-A, epoxy grade, hopper cars, dlvd. ... lb.	.67	-
polycarbonate grade, same basis lb.	.71	-
Blanc fixe, syn., imp., bags ... lb.	.20	-
Bois de rose oil, Braz., dms. ... lb.	10.75	12.00
Peruvian, dms. ... lb.	10.75	-
BON toner (red 48) dms., frt. alld. .. lb.	7.25	8.05
(red 52) dms., same basis ... lb.	6.50	7.90
Bonemeal, steamed, dom., bgs., c.l., f.o.b. Midwest plants ... ton	300.00	-
imp., same basis, f.o.b. Philadelphia ... ton	No Prices	
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).		
Bone phosphate, precip. (see Calcium phosphate tribasic).		
Borax, tech. anhyd. 99%, bgs., c.l., works ... ton	647.00	-
bulk, c.l., works ... ton	602.00	-
Borax, tech., gran., decahydrate, 99½% bgs., c.l., works .. ton	237.00	-
bulk, c.l., works ... ton	192.00	-
tech., pentahydrate, gran. 99½%, bgs., c.l., works. ... ton	220.00	-
bulk, c.l., works ... ton	265.00	-
Borax, NF (See Sodium borate).		
Boric acid, tech., gran., 99.9%, bgs., c.l., works ... ton	614.00	-
bulk, c.l., works ... ton	569.00	-
Boron trichloride, CP, 1,800-lb. cyls., works ... lb.	3.80	-
Boron trifluoride, 60-lb. cyls., t.l., f.o.b. works ... lb.	4.03	-
bulk, same basis ... lb.	3.47	-
Boron trifluoride, etherate, 500-lb. dms., t.l., f.o.b., works ... lb.	2.35	-
phenolate, 500-lb. dms., t.l., same basis ... lb.	1.65	-
Bromine, dms., t.l., works ... lb.	.67	-
bulk, 45,000-lb. min., works ... lb.	.33	.34½
purif., t.l., dlvd. ... lb.	.75	-
Bromine dlvd., prices for dms. and bulk shipped W. of Rockies, 1c.-per-lb. higher. Bulk t.t. prices 1c. to 2½c.-per-lb. higher for 30,000-lb. min. and 4c. to 5½c.-per-lb. higher for 15,000-lb. min.		
Bromochloromethane, dms., c.l., f.o.b. Midland ... lb.	1.12	-
Butadiene, tanks, f.o.b. ... lb.	.26	.26½
1,4-Butanediol, tanks, f.o.b., frt. equald. ... lb.	.80	-
dms., same basis ... lb.	.88	-
Butene-1, tanks, f.o.b. works ... lb.	.28	.28
n-Butyl acetate, syn., tanks, frt. alld. lb.	.52½	-
n-Butyl acrylate, tanks, frt. alld. E. .. lb.	.69	-
n-Butyl alcohol, syn., ferment, tanks, frt. alld. ... lb.	.34	-
sec-Butyl alcohol, syn., tanks, dlvd. lb.	.365	-
tert-Butyl alcohol, syn., tanks, dlvd. E. ... lb.	.70	-
Butyl aldehyde (see Butyraldehyde)		
Butyl benzyl phthalate, tanks, frt. alld. ... lb.	.53	-
Butyl chloride, tanks, works ... lb.	.99	1.00
Butyl cyclohexyl phthalate, tanks, dlvd. ... lb.	1.01	-
n-Butyl ether, dms., c.l., t.l., works. . lb.	1.85	-
Butyl isodecyl phthalate, tanks, dlvd. ... lb.	.35	-
n-Butyl lactate, tanks, f.o.b. works . lb.	1.58	-
n-Butyllithium, 15% soln., 1,000-lb. lots or more, cyls., 100% basis, dlvd. ... lb.	15.45	-
tanks, 3,000-lb. min., 100% basis, dlvd. ... lb.	14.75	-
Butyl methacrylate, tanks, frt. equald. ... lb.	.88	-
Butyl octyl phthalate, tanks, dlvd. E. ... lb.	.45	.47
Butyl oleate, dist., dms., c.l. ... lb.	.88	-
tanks ... lb.	.83	-
p-tert-Butylphenol, tanks works ... lb.	.70	-
Butyl phthalate (see Dibutyl phthalate).		
Butyl stearate cosmetic, dms., 77 dms. or more ... lb.	.91	.97
tanks ... lb.	.92	-
Butyl stearate tech., t.l. ... lb.	.60	.62
tanks ... lb.	.55	.58
Butylamine (see Mono-, Di- and Tributylamine).		
tert-Butylamine, dms., c.l., t.l., f.o.b. works ... lb.	1.31	-
tanks, same basis ... lb.	1.17	-
Butylated hydroxyanisole, food grade, dms., dlvd. ... lb.	8.80	8.85
Butylated hydroxytoluene, food, feed grades c.l., t.l., bgs., dlvd. lb.	1.24	1.30
tech., bgs., c.l., t.l., dlvd ... lb	1.24	1.30
1,3-Butylene glycol, tanks, dlvd. ... lb.	.72	-
Butyraldehyde, tanks, dlvd. ... lb.	.29½	.38
Butyric acid, tanks, frt. alld. ... lb.	.44½	-
Butyric ether (see Ethyl butyrate).		
Butyrolactone, tanks, f.o.b. plant ... lb.	1.20	-
n-Butyronitrile, dms., c.l., dlvd. ... lb.	.93	-
tanks, dlvd. ... lb.	.54	-

C

Cadmium chloride, purif. cryst., 100-lb. dms., t.l., works ... lb.	3.73	-
Cadmium, CP, red, dark shade, bbls., 100-lb. lots, frt. alld., E. of Rockies ... lb.	11.33	16.35
light shade, bbls., same basis ... lb.	9.16	12.06
medium shade, bbls., same basis lb.	10.69	15.20
medium-light shade, bbls., same basis ... lb.	10.26	14.50
Cadmium, CP yellow, all shades, bbls., 100-lb. lots, frt. alld., E. of Rockies ... lb.	6.10	7.07
Cadmium fluoborate, liq. conc., dms., t.l., works, frt. equald. ... lb.	2.27	-
medium-light shade, bbls., same basis ... lb.	3.22	-
Cadmium-mercury lithopone, maroon shade, bbls., frt. alld. E. of Rockies ... lb.	4.60	-
Cadmium metal ingots or sticks, ton lots, cs., dlvd. ... lb.	1.20	1.50
Cadmium nitrate, purif., flake 400-lb. dms., c.l., t.l., f.o.b. shp. pt. lb.	2.10	-
Cadmium-selenide lithopone, orange, light shade, bbls., 400-lb. lots, frt. alld. E. of Rockies ... lb.	3.97	4.00
deep shade, bbls., same basis ... lb.	4.47	4.50
Cadmium-selenide lithopone, red, dark shade, bbls., same basis. . lb.	6.77	6.80
light shade, bbls., same basis ... lb.	5.27	5.30
medium light shade, bbls., same basis ... lb.	5.72	5.75
medium shade, bbls., same basis lb.	6.37	6.40
maroon shade, bbls., same basis. lb.	7.47	-
Cadmium-selenide lithopone, yellow, all shades, bbls., same basis. . lb.	2.97	3.00
Cadmium sulfate, 60-lb. dms., any quantity, f.o.b. ship. pt. ... lb.	4.05	-
Caffeine, dom., USP, syn. cryst. anhyd., powd., 100-lb. dms., c.l., t.l., frt. alld ... lb.	4.80	-
imp., cryst., anhyd., powd., dms., 10,000 lbs. or more ... lb.	4.70	4.85
Calamine, USP, dms. ... lb.	1.60	1.70
Calamus oil, dms. ... lb.	26.80	35.00
Calciferol. (see Ergocalciferol).		
Calcium acetate, purif., powd., dms., t.l., works ... lb.	.87	-
Calcium carbide, std., generator size, bulk, c.l., f.o.b., works ... ton	402.00	-
Calcium carbonate, pulverized, 325-mesh, bgs., bulk, f.o.b. works ... ton	34.50	-
slurries, 54% solids, same basis ... ton	167.00	-
72% solids, same basis ... ton	98.00	-
quicklime, gran., ind., bulk, works ... ton	67.00	-
Calcium carbonate, coated, bgs., c.l., works ... lb.	.0742	.1350
Calcium carbonate, precip., bgs., c.l., t.l. ... ton	370.00	430.00
Calcium carbonate precip. medium, bgs., c.l., works ... ton	95.00	140.00
precip. dense, bgs., c.l., surface treated, bgs., c.l., works .. ton	195.00	-
ultrafine, USP, bgs., c.l., works ... ton	160.00	170.00
Calcium chloride, conc., reg. grade. 77-80%, flake, bulk, c.l., works ... ton	153.00	-
100-lb. bgs., c.l., same basis ... ton	196.00	-
anhyd., 94-97%, flake or pellet, bulk, c.l., same basis ... ton	217.00	-
80-lb. bgs., c.l., same basis ... ton	279.00	-
brining grade, 80-lb. bags ... ton	285.00	-
Calcium chloride, liq., 100 percent basis, t.c., t.l., barge ... ton	99.75	-
45% same basis ... ton	116.00	-
Calcium chloride, USP, gran., 225-lb. dms., t.l., frt. equald. ... lb.	.90	-
Calcium citrate, purif., 200-lb. dms., 10,000 lbs. or more, f.o.b. works ... lb.	3.62	-
Calcium cyanamide, indust., anhyd. dms., works ... ton	300.00	-
Calcium gluconate, USP powd. t.l. . lb.	1.80	-
Calcium hydride, lump, dms., 25-1,000-lb. lots. works ... lb.	10.50	13.25
Calcium hypochlorite, 100-lb. dms., truckloads ship.t. E. of Rockies ... 100 lbs.	92.40	-
Calcium hypophosphite, dms., bulk, 500 kilos or more ... kilo	13.75	14.50
Calcium iodate, FCC dms., f.o.b. works ... lb.	5.50	-
Calcium iodide, 50-kilo dms., f.o.b. works ... kilo	23.65	25.65
Calcium lactate, NF, powd., pentahydrate, dms., 24,000 lbs. or more, f.o.b. works ... lb.	2.00	-
NF, gran., trihydrate, same basis. lb.	2.10	-
special gran., dried grade, same basis ... lb.	2.80	-
Calcium naphthenate, liq., 4% Ca., c.l., f.o.b. plant, E. of Rockies. . lb.	.85	-
d-Calcium pantothenate, USP, 100-500-kilo lots. ... kilo	10.50	11.50
dl-Calcium pantothenate, feed grade, f.o.b. frt. alld., 250 kilos or more ... kilo	8.00	8.50
dl-Calcium pantothenate, calcium chloride complex, feed grade, 160 grams per lb., f.o.b., frt. alld., 500 lbs or more ... lb.	2.75	-
Calcium phosphate, dibasic, feed grade, 18½% P. bulk, c.l., t.l., f.o.b. New Wales, Fla., frt. equald. ... ton	254.00	-
f.o.b. Montpelier, Iowa, same basis ... ton	266.50	-
f.o.b. Alden, Iowa and Weeping Water, Neb., same basis . ton.	266.50	-
Calcium phosphate, dibasic, dihydrate, USP, bgs., c.l., t.l., works, frt. equald. ... 100 lbs.	62.50	-
anhyd., USP, same basis. . 100 lbs.	71.75	-
dentifrice grade, same basis. 100 lbs.	49.90	-
Calcium phosphate, monobasic, monohydrate, food grade, bgs., c.l., t.l., works, frt. equald. ... 100 lbs.	50.50	-
anhyd., food grade, same basis ... 100 lbs.	54.95	-
tribasic, NF precip., bgs., c.l., frt. equald. ... 100 lbs.	62.50	-
Calcium propionate, dms., 2,000 lbs. or more f.o.b. frt. alld. ... lb.	.50	-
Calcium silicate, hydrated, bgs., c.l., works ... lb.	.07	-
Calcium silicate, paint grade (see Wollastonite).		
Calomel, NF, mild powd., 100-lb. dms., f.o.b. works ... lb.	8.50	-
Camphene chlorinated, 67-69% (see Toxaphene).		
Camphor, monobromated, dms., kgs. ... lb.	3.63	3.70
Camphor, syn., tech., 165-lb. dms., 5,000 lbs. or more ... lb.	1.80	-
USP, powd., 165-lb. dms., 5,000 lb. lots or more ... lb.	2.36	-
syn., refd., 1-oz. tablets, ctns. 1,000-lb. lots or more ... lb.	3.50	-
Camphor oil, yellow, 25-lb. dms ... lb.	2.50	-
white, dms. ... lb.	1.60	-
spec. grav., 1.070, dms. ... lb.	2.00	2.25
Cananga oil, Indonesian, dms. ... kilo	17.00	-
Candelilla wax, crude, bgs. ... lb.	1.90	-
refd. pure, bgs. ... lb.	2.10	-
Capric acid, coml, pure, dms. ... lb.	.60	.65
tanks ... lb.	.60	.65
Capric aldehyde (aldehyde C-10) dms., cns. ... lb.	3.95	5.35
Caprolactam monomer, flake, bgs., t.l., f.o.b. shipping point ... lb.	.87	-
molten, tanks, same basis ... lb.	.85	-
Capryl alcohol sec. 92-98% tanks, f.o.b. works ... lb.	.35	-
Caprylic acid, coml. pure tanks ... lb.	.73½	-
Capsicum (see Pepper, red).		
Capsicum oil (see Capsicum oleoresin).		
Capsicum oleoresin, NF, from dom. pepper, dms. ... lb.	11.00	-
NF, from African pepper, dms.		
500,000 pungency ... lb.	9.00	-
1,000,000 pungency ... lb.	17.00	18.00
Caraway oil, Poland, dms. ... lb.	22.00	25.00
Caraway seed, Dutch, bgs. ... lb.	.71	-
Egyptian, bgs. ... lb.	.68	-
Carbon black, furnace, fast extruding, (FEF), bulk, c.l., works. ... lb.	.3175	-
bgs., c.l., works ... lb.	.3375	-
general purpose (GPF), bulk, c.l., works ... lb.	.3125	-
bgs., c.l. works ... lb.	.3325	-
high abrasion (HAF), high structure, bulk, c.l. works ... lb.	.3300	-
bgs., c.l., works ... lb.	.35	-

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

Carbon Black, low structure, bulk, c.l. works ... lb.	.3225	-
bags, c.l. works ... lb.	.3425	-
intermediate-super-abrasion (ISAF) ... lb.	.3450	-
bgs., c.l. works ... lb.	.3650	-
super-abrasion (SAF), bulk, c.l., works ... lb.	.3850	-
bgs., c.l., works ... lb.	.4050	-
semi-reinforcing (SRF), bulk, c.l., works ... lb.	.3125	-
bgs., c.l., works ... lb.	.3325	-
Carbon black, thermal, medium, bgs. c.l., works ... lb.	.30	.30½
bulk, c.l. works ... lb.	.32	.34½
Carbon black oil, barge, f.o.b. Gulf refineries ... bbls.	14.50	-
f.o.b. W. coast refineries ... bbls.	14.50	-
Carbon disulfide, t.c., f.o.b. works ton	420.00	-
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. ... lb.	.36	-
tech., dms., c.l., t.l., frt. alld. ... lb.	.31	-
tank transport (min. 4,000 gals.) frt. alld. ... lb.	.24	-
Carboxymethyl cellulose (see CMC).		
Cardamom oil, NF, bots. ... lb.	75.00	100.00
Cardamoms, decort. Guatemalan. . lb.	4.25	-
green, Guatemalan, bgs. ... lb.	6.25	9.75
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd. ... lb.	135.00	140.00
Carnauba wax, Parnahyba, No. 1, yellow, bgs., ton lots. ... lb.	1.95	2.05
Ceara, No. 1, yellow, bgs., ton lots. ... lb.	1.75	1.90
North Country, No. 2, refined, bgs., ton lots ... lb.	1.55	1.65
Carnauba wax, North Country No. 3, centrifuged, bgs., ton lots . lb	1.10	-
North Country, No. 3, refined, bgs., ton lots ... lb.	1.30	1.45
Powdered carnauba wax, 20 to 100 mesh, 20c. per lb. higher.		
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram., 33 lbs. or more.. lb.	32.75	-
b-Carotene, liq. in vegetable oil, 500,000 A units per gram., 33 lbs. or more ... lb.	40.75	-
b-Carotene, dry, beads, 10%, 167,000 A units per gram 50-lb. cns lb.	26.85	-
d-Carvone, 25-lb. dms., syn. ... lb.	48.00	-
l-Carvone ... lb.	7.00	7.25
Cascara sagrada bark, bulk ... lb.	1.00	-
Casein, imp., acid-precip., grd., 30-mesh, Australian, edible, same basis. c.i.f. ... lb.	1.45	-
Australian, indust., same basis. c.i.f. ... lb.	1.365	-
Cassella acid, 303 mol. wt., dms., frt. alld., 100% basis ... lb.	3.70	-
Cassia, Korintji "A" bgs. ... lb.	.78	.92
"B" bgs. ... lb.	.72	.78
Castor oil, raw, No. 1, Braz. tanks. . lb.	.31½	.33
USP 5-9 dms. ... lb.	.74	-
refd. deod., 5-9 dms ... lb.	.78	-
blown, 5-9 dms ... lb.	.75	-
dehydrated, bodied, tanks ... lb.	.74	-
dehydrated, unbodied, tanks ... lb.	.65	-
Castor oil, acids dehydrated, dms. . lb.	1.10	-
ricinoleic acid. ... lb.	.79½	.83
Castor pomace, bgs., container load, f.o.b., Miami, Fla. ... ton	164.00	-
Castoreum, nat., cns. ... lb.	18.00	35.00
syn., cns. ... lb.	11.00	-
Catechol, CP, 45-kilo dms., 60-239 dms., f.o.b. ... kilo.	7.93	-
tech., bgs., t.l., same basis ... kilo.	3.71	-
Caustic potash (see Potash, caustic).		
Caustic soda (see Soda, caustic).		
Cedarleaf oil, dms. ... lb.	17.60	-
Cedarwood oil, Texas, dms., cns ... lb.	3.50	4.00
Virginia ... lb.	3.70	4.20
Cedrol, prime dms. ... lb.	5.25	-
Cedryl acetate, dist., dms. ... lb.	4.25	5.30
Celery seed, Indian, bgs. ... lb.	.62	.64
Celery seed oil ... lb.	50.00	53.00
Cellulose acetate, powd., bgs., t.l., dlvd. E. ... lb.	1.30	-
Cellulose acetate butyrate, powd., 17% butyl content, bgs., t.l., dlvd. E. ... lb.	1.75	-
38% butyl content, bgs., dlvd. E. . lb.	1.59	-
50% butyl content, bgs., dlvd. E. . lb.	1.81	-
55% butyl content, bgs., dlvd. E. . lb.	1.83	-
Cellulose gum, pure, high vis., bgs., 24,000-lb. lots or more works, f.o.b. Hopewell, Va. ... lb.	1.60	1.70
std., low or medium vis., bgs., c.l., t.l., f.o.b. Hopewell, Va. ... lb.	1.80	1.90
Cerium concentrate CeO_2, 50 lbs. .. lb.	1.35	-
Cerium hydroxide 90% CeO_2, dms., works ... lb.	5.40	-
77% CeO_2, dms., works ... lb.	4.20	1.60
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. ... lb.	1.85	1.90
Cetyl alcohol, NF, cns., c.l., t.l., dlvd. E. lb.	.68½	1.27
Chalk (see Calcium carbonate).		
Chamomile flowers, Hungarian, cs. . lb.	4.25	4.50
Roman, cs. ... lb.	4.94	-
Egyptian, whole ... lb.	2.70	3.00
Chamomile oil, blue, Egyptian ... lb.	545.00	-
blue, Hungarian ... lb.	370.90	-
Chenopodium oil, NF, cns. ... lb.	15.00	-
Chicago acid, dry, bbls., frt. alld. ... lb.	13.50	-
Chilies (see Pepper, red).		
Chlordane, tech., 100% basis dms., c.l., frt. alld. ... lb.	3.60	-
Chlorendic anhydride, tech., dms., t.l., works ... lb.	1.30	-
Chlorinated paraffin, 40% chlorine, bulk, dlvd., Zone 1 ... lb.	.45	.46½
50% chlorine, same basis ... lb.	.46	.47½
60% chlorine, same basis ... lb.	.45½	.46½
70% chlorine, resinous, 50-lb. bgs., c.l., dlvd., Zone 1 ... lb.	.69	

ABBREVIATIONS

THE TERMINOLOGY OF THE CHEMICAL MARKETPLACE

a/alpha
alld./allowed
amorph./amorphous
AMP/American melting point
anhyd./anhydrous
AOAC/Association of Official Agricultural Chemists
a.p.a./available phosphoric acid
approx./approximately
artif./artificial
ASTM/American Society for Testing & Materials

b/beta
Be/Baume
bbls./barrels
b.g./beta-gamma
bgs./bags
bls./bales
bots./bottles
b.p./boiling point
b.p.l./bone phosphate of lime
b.r./boiling range
bxs./boxes

C./Centrigrade
cbys./carboys
c.c./cubic centimeters
CD/completely denatured
c.i.f./cost insurance freight
c.l./carload
cns./cans
coml./commercial
conc./concentrated
cp/chemically pure
cps./centipoises
cryst./crystalline
cs./cases
ctns./cartons
cyls./cylinders

d-/dextro
dbl./double
denat./denatured
dest.-dist./destructively distilled
dl/dextro-laevo
dist./distilled
distr./distributor
dlvd./delivered
dms./drums
dom./domestic

E/East
e.p./end point
equald./equalized
exp./expressed
extr./extracted

F./Fahrenheit
f.a.s./free alongside
ferment./fermentation
f.f.a./free fatty acid
f.f.c./free from chlorine
f.f.p.a./free from prussic acid
fib./fiber
f.o.b./free on board
f.p./freezing point
frt./freight

g-/gamma
gal./gallon
g.p./general purpose
gran./granular
grd./ground

i.b.p/initial boiling point
imp./imported

incl./included
indust./industrial

kgs./kegs

l-/laevo
lb./pound
l.c.l./less carload
l.t.l./less truckload
liq./liquid

m-/meta
m.a.p./mixed aniline point
mcg./microgram
mfrs./manufacturers
min./minimum
molt./molten
m.p./melting point

N/nitrogen
n-/normal
nat./natural
neut./neutral
NF/National Formulary
No./number
Nom./nominal

o-/ortho
ord./ordinary
oz./ounce

P/phosphorus
p-/para
Pac./Pacific
pf./proof
phos./phosphate
photo/photographic
pkgs./packages
powd./powdered
precip./precipitated
prod./producer
pt./point
pulv./pulverized
purif./purified

redist./redistilled
refd./refined
refy./refinery
resub./resublimed
ret./returnable

SD/specially denatured
s.d./single distilled
SE/Southeast
sec./secondary

secs./seconds
sp.g./specific gravity
ship't/shipment
soln./solution
std./standard
syn./synthetic

tanks/railroad tankcars
tech./technical
tert./tertiary
t.l./truckload
ton/refers to short ton of 2,000 pounds
TVA/temporary voluntary allowance
t.w./tankwagons

USP/United States Pharmacopeia

vis./viscosity
VM&P/varnish makers & painters

W/West
whse./warehouse
w.w./water-white

NOTE: A unit-ton is 1 percent of 2,000 pounds of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the unit-ton price shown in Chemical Marketing Reporter gives the price of 2,000 pounds of the material.

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

Chlorinated paraffin, Zone 2 prices are 1c. per lb. higher and Zone 3 prices are 2c per lb. higher and t.l. drum prices are 5c per lb. higher

Chlorinated rubber, 5, 10, 20 cps., bgs, t.l., divd. ... lb.	1.68	-
40 cps, bgs., t.l., divd. ... lb.	1.92	-
125 cps., bgs., t.l., divd. ... lb.	2.60	-
300 cps., bgs., t.l., divd. ... lb.	2.75	-
Chlorine, tanks single units works, f.o.b., frt. equald. ... ton	195.00	200.00
Chloroacetic acid, mono, high purity, flake, 99% bulk f.o.b. works. ... lb.	.56	-
2-Chloro-4-aminotoluene, tech., liq., dms., c.l., t.l., f.o.b. works. lb.	1.88	-
o-Chloroaniline, liquid, dms., c.l., f.o.b. works ... lb.	1.63	-
tanks, same basis ... lb.	1.55	-
p-Chloroaniline, solid, c.l., t.l., f.o.b. lb.	1.70	-
flake, dms., c.l., same basis ... lb.	2.00	-
o-Chlorobenzaldehyde, dms., t.l., works. ... lb.	2.45	-
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works ... lb.	3.84	3.85
o-Chlorobenzoic acid, dms. t.l. wks. . lb.	3.90	-
p-Chlorobenzoic acid, dms., 500-lb. lots or more, works ... lb.	1.69	2.25
Chloroform, tech. tanks, distr. divd. .. lb.	.34½	-
tech., consumers, tanks, divd. ... lb.	.34½	-
NF tanks, min., consumer, 4,000 gals. divd. ... lb.	.35½	-
2-Chloro-4-nitroaniline, paste, commodity basis, dms., t.l., f.o.b. ... lb.	3.08	-
powd., same basis ... lb.	3.15	-
4-Chloro-2-nitroaniline, paste, 172.5 mol. wt., commodity basis, dms., t.l., f.o.b. ... lb.	2.25	-
powd., same basis ... lb.	2.70	-
o-Chlorophenol, dms., c.l., frt. equald ... lb.	2.00	2.40
p-Chlorophenol, dms., c.l., frt. equald ... lb.	1.25	1.70
Chloropicrin, coml., 225-lb. cyls. t.l., frt. equald ... lb.	.98	-
Chlorosulfonic acid, tanks, frt. equald ... lb.	.18½	-
p-Chlorotoluene, tech., tanks, works ... lb.	1.00	-
Cholecalciferol, dry, 40,000,000 units per gram, kilo lots ... gm.	24.00	-
Choline bitartrate, cryst., 98% min., 50 kilo dms., f.o.b. Springfield, Mo. ... kilo.	6.90	-
Choline chloride, feed grade, 70% aqueous, t.c., t.t., divd. E of Rockies ... lb.	.24½	.28
60% dry supplement ... lb.	.37	.39
Choline chloride, 60% dry supplement, bulk hopper cars ... lb.	.39	.48
bgs., 50,000 lbs. min. ... lb.	.48½	-
Choline chloride, pharmaceutical, 50 kilo, lots, f.o.b. Springfield, Mo. ... kilo.	5.00	-
Choline dihydrogen citrate, 98% min., 50 kilo lots, f.o.b. Springfield, Mo. ... kilo.	6.00	-
Chrome green, CP extra light, bgs., divd. E. of Rockies ... lb.	1.68	-
light, bgs., same basis ... lb.	1.70	-
medium, bgs., same basis ... lb.	1.72	-
extra deep, CP., same basis ... lb.	1.74	-
Chrome orange, CP, bgs., divd. E. of Rockies ... lb.	.83	.89
Chrome yellow CP bbls., divd. E. of Rockies ... lb.	1.09	1.18
Chromic acid, 99¾%, flake dms., c.l., frt. equald ... lb.	1.18	-
grd., same basis ... lb.	1.25	-
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. . lb.	.10	-
Chromium fluoride, dms., t.l., works ...	.81	-
Chromium nitrate, dms., t.l., f.o.b. . lb.	1.10	-
soln., 500-lb. dms. same basis . . lb.	.69	-
Chromium oxide, hydrated, 50-lb. bgs., c.l. ... lb.	5.50	-
pure, bgs., c.l. ... lb.	1.90	2.00
Cinnamic aldehyde, cns., dms. ... lb.	1.65	2.45
Cinnamic alcohol, 25-lb. cns. ... lb.	4.50	-
Cinnamon, H2 ... lb.	1.05	1.10
Cinnamon bark oil, bots ... lb.	88.00	95.00
Cinnamon leaf oil, dms ... lb.	2.80	-
Citral, nat., dms ... lb.	5.50	6.65
syn., 55-gal. dms. ... lb.	3.75	4.75
Citric acid, USP, hydrous, gran. 250-lb. dms., t.l. ... lb.	1.19	-
Citric acid, USP, anhyd., gran. 250-lb. dms., t.l., del. ... lb.	.86	-
Citric acid anhyde, powder bc. higher		
Citronella oil, Ceylon, dms. ... lb.	2.12	2.24
Java, dms. ... kilo	4.50	-
China, dms. ... kilo	4.30	-
Citronellal, 25-lb cans ... lb.	3.85	7.40
Citronellol ... lb.	3.60	-
Citronellyl acetate, dms. ... lb.	5.50	6.50
Citronellyl formate, 25-lb. cns. ... lb.	6.85	-
Civet, artif., bots ... lb.	20.00	-
nat. ... kilo	500.00	-
Clay ball, dom. air floated, bgs., c.l., Tenn. ... ton	49.00	-
dom., crushed, moisture-repellent, bulk, c.l., Tenn. ... ton	24.00	-
Clay China (see Kaolin).		
Cleaners, naphtha, 140° flash tanks., New Jersey or New York, divd. ... gal.	1.40	-
Clove leaf oil Indonesian, reg. dms. kilo	2.85	3.00
Madagascar, reg. ... lb.	4.20	-
Clove bud oil ... kilo	25.00	-
Cloves, Brazil ... lb.	2.35	2.40
Zanzibar ... lb.	4.20	-
Madagascar ... lb.	2.35	2.40

CMC, technical, 98% minimum, low or medium vis., bgs., 24,000 lbs., f.o.b. Hopewell, Va., 100% basis ... lb.	1.25	-
detergent makers, f.o.b. manufacturing point ... lb.	.84	-
CMC, purif., high vis., (see Cellulose gum).		
Coaltar pitch, indust., liq., works . ton.	225.00	275.00
roofing, 140-155, Federal specification RP-381 Type 1, bulk works ... ton	350.00	-
Cobalt acetate, dms., t.l., frt. alld. . . lb.	3.61	4.25
Cobalt carbonate, powd., dms., frt. alld. ... lb.	6.61	8.16
Cobalt chloride, dms., 5,000 lbs. or more, ft. equald ... lb.	4.15	-
Cobalt hydrate, dms., t.l., frt. alld. . . lb.	8.20	10.55
Cobalt metal, 99.5-99.9%, 250-kilo. dms., f.o.b. NY, Chicago. . lb.	11.70	-
Cobalt naphthenate, liq., 6% Co., dms., divd. ... lb.	2.06	-
Cobalt nitrate, dms., t.l., frt. alld. ... lb.	2.74	3.45
Cobalt oxide, imp., black, 72-73% Co. ... lb.	9.51	-
Cobalt oxide, imp., 70-71% Co. ... lb.	9.78	-
Cobalt phosphate powd. 32.1% Co., dms., divd. ... lb.	1.35	-
Cobalt resinate fused, 3% Co., dms. ... lb.	.38½	-
Cobalt sulfate, cryst., bgs., 10,000 lbs. or more, frt. alld. E. ... lb.	2.81	3.54
monohydrate, dms., frt. alld. ... lb.	4.56	6.02
Cobalt tallate, 6% Co., dms., divd. . lb.	2.16	-
Cocillana bark, bls. ... lb.	.40	.48
Cocoa butter, spot ... lb.	1.95	2.05
Coconut oil (See Oils, Fats & Waxes market report.).		
Coconut oil acids, distilled, t.c., f.o.b. ... lb.	.52	.58
double distilled, same basis ... lb.	.54	.63
Cod oil, f.o.b., Gloucester, Mass., bulk ... gal.	6.50	-
Codeine alkaloid, NF, 25-kilo lots, kilo.	900.00	-
Codeine phosphate, USP, cns., 25-kilo lots ... kilo	640.00	-
Codeine sulfate, NF cns., 25-kilo lots ... kilo	775.00	-
Codliver oil, NF, dms. ... gal.	6.50	7.25
Copaiba balsam, dms ... lb.	1.60	-
Copaiba oil, cns., dms. ... lb.	3.75	-
Copper acetate, monohydrate, cryst., tech., dms., t.l., works. ... lb.	.71	.74
Copper bromide, (cupric) 200-lb. dms., 100,000-lbs. -per-year contracts, works ... lb.	1.34	-
Copper carbonate, 55% Cu, dark, dense, 50-lb. bgs., c.l., t.l., works ... 100 lbs.	108.30	-
light, fluffy, 50 lb. bags, c.l., t.l., works ... 100 lbs.	109.30	-
Copper chloride (cupric), anhyd., c.l., works ... lb.	.90	-
Copper cyanide, tech. dms., 24,000-lb. lots or more ... lb.	2.30	2.62
Copper fluoborate, (cupric), liq. conc., dms., t.l., works, frt. equald ... lb.	1.05½	-
Copper gluconate, FCC grade, 25-lb. dm., frt. equald ... lb.	6.50	-
Copper metal electrolytic wire bars, divd., domestic, basis ... lb.	.66½	-
Copper naphthenate, liq., 8% Cu., dms., frt. alld ... lb.	1.19	-
Copper nitrate (cupric), purif., flake, dms., t.l., works ... lb.	.43¼	-
Copper oleate, solid, 6% Cu. dms., works frt alld ... lb.	.97	-
Copper oxide, black (cupric), dms., 80,000-lb. lots, works ... lb.	1.21	-
red (cuprous), dms., 97%, USN Type 1, (AA), 80,000-lb. lots, works ... lb.	1.19	1.20
red, 90%, Type 2, same basis ... lb.	1.15	-
Copper-8-quinolinolate, 10%, liq. emulsion, t.l., divd ... lb.	2.52	-
Copper sulfate, cryst., pentahydrate, 99% bgs., c.l., f.o.b. works ... 100 lbs.	46.45	-
CP, pentahydrate, cryst., dms., l.c.l., works ... 100 lbs.	60.00	-
monohydrated, 35% Cu, dms., c.l., works ... 100 lbs.	75.10	-
basic, bgs., c.l., works ... 100 lbs.	88.30	-
Coriander oil, USP, dms ... lb.	22.00	28.00
Coriander seed Moroccan ... lb.	.26	.27
Rumanian ... lb.	.26	-
Corn oil (See Oils, Fats & Waxes market report).		
Corn oil, crude, foots (soapstock), 95% acid; New York ... lb.	.13½	.14
Corn oil acid, dms ... lb.	.50	-
tanks ... lb.	.32	.40
Corn syrup 43 Be., tanks, f.o.b. works ... 100 lbs.	11.22	11.43
Cortisone acetate, USP, dms., 5 kilos or more ... gram.	.80	-
Cottonseed meal (See Oils, Fats & Waxes market report.)		
Cottonseed oil (See Oils, Fats & Waxes market report.)		
Cottonseed oil, acidulated (soap stock), acid, 95%, tanks, N.Y. ... lb.	.13	-
Cottonseed oil acids, dist., dms ... lb.	.63	-
tanks ... lb.	.55	-
Coumarin, NF X, cryst., over 600-lb. lots ... lb.	6.00	6.20
Cream of tartar (see Potassium bitartrate).		
Creosote, coaltar, grade 1, tanks, f.o.b. works ... gal.	1.15	1.18
soln., 80/20, tanks, same basis . gal.	1.134	1.17
p-Cresidine, fused, dms., works ... lb.	4.31	-
m-Cresol, 95-98%, dms., t.l., f.o.b. . lb.	1.71	-
tanks, same basis ... lb.	1.65	-
m,p-Cresol, 99%, dms., t.l., f.o.b. ... lb.	.94	-
bulk, same basis ... lb.	.82	-
o-Cresol, 99% pure, dms., t.l., f.o.b. lb.	.87	-
bulk, same basis ... lb.	.75	-
98% pure, dms., t.l., f.o.b. ... lb.	.87	-
bulk, same basis ... lb.	.75	-
p-Cresol, 98%, dms., t.l., f.o.b. ... lb.	1.22	-
bulk, same basis ... lb.	1.15	-
Cresylic acid, coaltar, dom., metapara content above 25%, resin and tricresyl phosphate grades, tanks, frt. alld ... lb.	.58	-
Cresylic acid, dom., metapara content 25% or less, tanks, frt. alld. lb.	.58	-
Crotonic acid, 200-lb. dms., t.l., f.o.b. divd. ... lb.	1.50	-
Cryolite syn., bulk, c.l., works ... ton	510.00	550.00
Cube root, powd., 5% rotenone, basis, 50-lb. bgs., t.l., works ... lb.	.60	-
Cumene, bulk, contract, f.o.b. ... lb.	.14½	-
Cumin seed, Indian, bgs. ... lb.	.82	.85

Cyanuric acid, dms., c.l., t.l. frt. equald ... lb.	1.16	1.37
Cyclamen aldehyde, 50% min. aldehyde content, dms. ... lb.	4.85	-
86.5%, dms. ... lb.	7.35	9.20
90-92%, dms. ... lb.	7.85	-
Cyclohexane, bulk, barges, works ... gal.	1.01375	1.03375
Cyclohexanol tech., tanks, f.o.b. ... lb.	.52	.56½
Cyclohexanone tech., tanks, f.o.b. works ... lb.	.55½	.58½
tanks, divd. ... lb.	.565	-
Cyclohexylamine, tech., tanks, works ... lb.	.85	1.05

D

2,4-D acid, tech., 50-lb. bgs., c.l., t.l., works, frt. equald ... lb.	1.10	1.25
2,4-D butyl ester, tech., 55-gal. dms., c.l., t.l., works, frt. equald. . lb.	1.30	-
tanks, same basis ... lb.	1.25	-
2,4-D dimethylamine salt, t.c., t.t. works, frt. alld ... gal.	8.05	-
Decyl alcohol, mixed isomers, tanks, divd ... lb.	.32	-
perfume grade, dms ... lb.	.75	-
Defluorinated phosphate (tricalcium), feed grade, 18% P, 50-lb. bgs., c.l., f.o.b. New Wales, Fla., frt. equald ... ton	233.00	-
t.l., same basis ... ton	212.00	-
bulk, f.o.b. White Springs, Fla., same basis ... ton	214.25	-
divd. bulk, Calif., Nev., Utah, Ariz- ... ton	264.33	-
divd. bulk, Wash., Ore., Ida., Mont. ... ton	385.02	-
Denatured alcohol, ethyl, CD18, CD19, tanks, divd. E. ... gal.	1.87	-

NOTE: Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl,		
SD2B, tanks, divd. E. ... gal.	1.81	-
SD3A, tanks, divd. E. ... gal.	1.76½	-
SD23A, tanks, divd. E. ... gal.	1.86	-
SD23H, tanks, divd. E. ... gal.	1.89	-
SD29, tanks, divd. E. ... gal.	1.83	-
SD30, tanks, divd. E. ... gal.	1.72½	-
SD35A, tanks, divd. E. ... gal.	1.88½	-
Denatured alcohol, ethyl, brucine formula SD40, tanks, divd. E. ... gal.	1.83	-
ethyl, optional formula, SD40, tanks, divd. E. ... gal.	1.82½	-

For anhyd. alcohol on above formulas, prices are 12c. per gal. higher.

West Coast divd. prices are the same as Eastern prices, except in Idaho, Oregon and Washington where a 5c. differential on tankcars is maintained.

Desoxyephedrine hydrochloride (See Methamphetamine hydrochloride)		
Detergent alkylate, straight chain dodecylbenzene, tanks, barges, f.o.b. ... lb.	.45	-
Dextrin, corn, canary dark, paper bgs., c.l., works ... 100 lbs.	26.04	-
white, paper bgs., c.l., works ... 100 lbs.	27.43	-
Dextrose, anhyd., coml., bgs., c.l., divd. New York ... 100 lbs.	41.10	-
USP special, 100-lb. bgs., c.l., divd. New York ... 100 lbs.	46.50	-
Dextrose, hydrated coml, bgs., c.l., divd. New York ... 100 lbs.	24.25	-
Western zone ... 100 lbs.	25.60	-
Diacetone alcohol, acetone free, tanks, divd. ... lb.	.52	-
Diacetyl, flavor grade, dms ... lb.	9.25	15.00
Diammonium phosphate, fert. grade. min. 18% N, 46% P. bulk, c.l., f.o.b. Fla. works ... ton	145.00	150.00
Diammonium phosphate, feed grade, 18% N, 20% P, bulk. c.l., f.o.b. Fla. works ... ton	240.00	-
bgs., same basis ... ton	250.00	-
Diammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald ... 100 lbs.	52.50	-
food grade, bgs., c.l., t.l., same basis ... 100 lbs.	57.75	-
2,4-Di-tert-amylphenol, min. 95.5%, dms., c.l., t.l., works ... lb.	1.04	-
tanks, works ... lb.	.97	-
Diarylide yellow, OT, (yellow 14), dms., frt. alld ... lb.	6.20	-
o-Dianisidine dihydrochloride, 100%, MW 244, dms., t.l., divd. . . lb.	4.25	-
2,6-Di-tert-Butyl-p-Cresol (see Butylated hydroxytoluene)		
Dibutyl fumarate, tanks, f.o.b. works ... lb.	.70	.76
Dibutyl maleate tanks, f.o.b. works. lb.	.61	-
Dibutyl phthalate, tanks, works ... lb.	.68	-
Dibutyl sebacate tanks, works ... lb.	1.56	1.85
Dibutylamine, dms., c.l., divd. ... lb.	1.12	-
tanks, same basis ... lb.	1.06	-
Dicapryl phthalate tanks, frt. alld, E. lb.	.35	.37
2-5-Dichloroaniline, flake, dms., works ... lb.	2.00	-
fused, dms., works ... lb.	1.80	-
3,4-Dichloroaniline, tech. 88%, solid, dms., c.l., t.l., f.o.b. works . lb.	1.46	1.57
o-Dichlorobenzene, tech., 80%, dms., c.l., t.l., divd ... lb.	.52	-
tanks, same basis ... lb.	.45	-
98% refd., dms., c.l., same basis . lb.	.64	-
tanks, same basis ... lb.	.47	-
p-Dichlorobenzene, graded, 300-lb. dms., t.l., f.o.b., frt. equald. lb.	.51	.52
tanks, liq., same basis ... lb.	.43	.47
2,6-Dichloro-4-nitroaniline, dms., 10,000 lbs. or more, works. lb.	3.30	-
Dichlorophenoxyacetic acid (see 2,4-D).		
Dicyclohexylamine, dms., c.l., t.l., f.o.b. ... lb.	1.35	-
tanks, same basis ... lb.	1.25	-
Dicyclohexyl phthalate, bgs., c.l., t.l., divd. ... lb.	1.25	-
Dicyclopentadiene, high-purity, 97-98%, tanks, works ... lb.	.36	-
Diethanolamine, tanks, frt. alld. ... lb.	.44	.47
Diethanolamine lauryl sulfate, tanks, frt. alld ... lb.	.41	-
DDVP (see Dimethyl dichlorovinyl phosphate).		
Diethyl barbituric acid (see Barbital).		

Diethyl carbonate, tankwagons, f.o.b. works ... lb	1.40	-
Diethyl ethanolamine, CP dms., c.l., divd. ... lb	1.18	-
tanks, divd. ... lb.	1.10	-
Diethyl ethanolamine tech., 0c per lb lower.		
Diethyl oxalate, dms., c.l., f.o.b. works ... lb	1.80	-
Diethyl phthalate, tanks, f.o.b. ... lb.	.62	.65
odorless cosmetic grades, t.l., works ... lb	.97½	-
Diethyl sulfate, tanks, frt. alld E. . lb.	.59	-
Diethyl thiourea, dms., c.l., t.l., works ... lb	2.48	-
Di-2-ethylhexyl adipate (see Dioctyl adipate).		
Diethyl toluamide 95-97% min meta isomer, dms., t.l., f.o.b. works ... lb.	2.75	-
N,N-Diethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. ... lb	3.18	-
tanks, same basis ... lb	3.10	-
Diethylamine, dms., c.l., divd ... lb.	1.15	-
tanks, same basis ... lb.	1.02	-
N,N-Diethylaniline, dms., c.l., t.l., f.o.b works ... lb.	1.83	-
tanks same basis ... lb	1.75	-
Diethylbenzene, tanks, f.o.b. works lb.	.98	-
Di-2-ethylhexyl azelate (see Dioctyl azelate).		
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).		
Diethylene glycol, tanks, divd. E. ... lb.	.29½	.31½
Diethylene glycol monobutyl ether, dms., c.l., frt. alld E. ... lb.	.65	-
tanks, frt. alld. E. ... lb.	.57	-
Diethylene glycol monoethyl ether, dms., c.l., frt. alld E. ... lb.	.64	-
tanks, frt. alld. E. ... lb.	.56	-
Diethylene glycol monomethyl ether, dms., c.l., frt. alld. ... lb.	.62	-
tanks, frt. alld. ... lb.	.54	-
Diethylene glycol monobutyl ether acetate, dms., c.l., divd. E. . lb.	.80	-
tanks, divd. E. ... lb.	.72	-
Diethylene glycol monoethyl ether acetate, dms., c.l., frt. alld. E. lb.	.80	-
tanks, frt. alld ... lb.	.72	-
Diethylenetriamine, tanks, f.o.b. works ... lb.	1.60	1.61
Diethylenetriamine pentaacetic acid, pentasodium salt solution, tank-cars/tanktrucks, frt-equalized ... lb	.45	-
Digitoxin, USP, imp., bots. ... gram	2 60	3.00
Diglycol laurate, dms., ton lots. . lb	.32½	-
Diglycol stearate, dms., t.l. ... lb.	.62	.73
Dihydrazine sulfate, dms., works. . lb.	1.10	1.25
Dihydrostreptomycin sulfate, bulk kilo	48 00	-
Dihydroxyacetone, 50-kilo lots, works ... kilo	40 00	-
Di-isobutyl ketone, tanks, divd. ... lb.	.60	-
Di-isobutyl phthalate tanks, divd E. lb.	.55	.57
Di-isobutylene, tanks, f.o.b. Houston ... lb.	.37	-
Di-isodecyl phthalate, tanks, divd. . lb.	.39½	-
Di-isononyl phthalate, tanks, divd. . lb	.41	-
Di-iso-octyl azelate, tanks, divd. E . lb.	.90	-
Di-iso-octyl phthalate, tanks, divd. . lb.	.41	-
Di-isopropanolamine, dms., c l, frt. alld ... lb	.66½	-
tanks, same basis ... lb	.58½	-
Di-isopropylamine, dms., c.l. divd. . lb.	1.17	-
tanks, same basis ... lb.	1.07	-
Dilauryl 3,3-thiodipropionate, dms., t.l., frt. alld ... lb.	1.89	-
Dill oil, USP, dms ... lb.	7.00	8.25
Dimethyl anthranilate, dms. ... lb.	15.60	-
Dimethyl benzyl carbinyl acetate, 25-lb. dms. ... lb.	6.95	-
Dimethyl carbonate, dms. t.l., f.o.b. works ...	.90	-
Dimethyl dichlorovinyl phosphate, 55-gal. dms., divd. ... lb.	3.50	-
Dimethyl ethanolamine, anhyd., dms., c.l., divd. E. ... lb.	1.15	1.18
tanks, divd. E. ... lb.	1.07	1.10
Dimethyl ether, aerosol grade, tanks, divd ... lb.	.38	-
Dimethyl phthalate, tanks, f.o.b works ... lb.	.85	-
Dimethyl sebacate, tanks, f.o.b works ... lb.	2.28	2.58
Dimethyl sulfate, ref. dms., c.l., f.o.b. works ... lb.	.57	-
tanks ... lb.	.46	-
Dimethyl sulfide, tanks, works ... lb.	1.09	1.20
Dimethyl sulfoxide, tanks, works . . lb.	.78	-
Dimethylacetamide, bulk f.o.b. ... lb.	.87½	-
Dimethylamine, 25% soln., tanks, frt. equald., 100% basis ... lb.	.63½	-
40% soln., tanks, frt. equald., 100% basis ... lb.	.63½	-
anhyd., tanks, frt. equald. ... lb.	.64½	-
N,N-Dimethylaniline, t.l., f.o.b. ... lb.	1.03	-
t.l. dms. ... lb.	1.11	-
N,N-Dimethylformamide, dms., c.l., t.l., f.o.b., works ... lb.	.67	-
tanks, same basis ... lb.	.49	-
2,4-Dinitroaniline, tons-lots, f.o.b. . lb.	1.22	-
Dinitroaniline, orange toner, CP, bgs., divd. E. of Rockies ... lb.	6.20	
2,4-Dinitrochlorobenzene, crystalizing at 47°, t.l., f.o.b. Charlotte, N.C. ... lb.	.96	
2,4-Dinitrophenol, 250-lb. dms., f.o.b. Charlotte, N.C. ... lb.	1.95	
Dinitrotoluene, mix., tech. f.o.b. works ... lb.	.30	[illegible]
2,4-Dinitrotoluene, dms., c.l., t.l., works ... lb.	1.28	
tanks, works ... lb.	1.20	[illegible]
Dioctyl adipate, tanks, frt. alld. E. . . lb.	.67	
Dioctyl azelate, tanks, divd. E. ... lb.	.90	[illegible]
Dioctyl phthalate, tanks, divd. ... lb.	.45	
Dioctyl sebacate, 99%, tanks, f.o.b. works ... lb.	1.29	[illegible]
1,4-Dioxane, tanks, frt. alld. E. ... lb.	1.13	
t.l., same basis ... lb.	1.21	
Dipentaerythritol, bgs., c.l., t.l., divd. E. ... lb.	1.42	
Dipentene steam-dist., tanks, f.o.b. Fla. works ... lb.	.28	[illegible]
sulfate turpentine derived, tanks . lb.	.25	[illegible]
Dip oil (see Tar acid oil).		
Diphenhydramine hydrochloride. USP, dom., 1,000-kilo lots, dms., divd. ... kilo.	20.00	24.00
Diphenyl, 99.9%, bgs., c.l., t.l., works ... lb.	.74	[illegible]
tanks, works ... lb.	.66	[illegible]

Diphenyl oxide, tech. grade, tanks . lb.	1.11	1.20
Diphenylamine, refd., flake, bgs., t.l., works, frt. equald ... lb.	1.25	-
molten, tanks, works ... lb.	1.00	-
octylated, flake, bgs., t.l., f.o.b. works ...	7.68	-
Diphenylguanidine, bgs., t.l., frt. alld. ... lb.	2.52	
Diphenylhydantoin-sodium USP, dms. ... lb.	5.00	5.60
Diphenylmethane 4,4,-di-isocyanate, polymeric, bulk, c.l., min. frt. alld. ... lb.	.91	-
Dipropylene glycol, tanks, frt. alld. . lb.	.45	-
Dipropylene glycol monomethyl ether, dms., c.l., divd. ... lb.	.54	-
tanks, same basis ... lb.	.46	-
Di-o-tolylguanidine, powd., dms., t.l., frt. alld. ... lb.	2.92	-
Di-o-tolylthiourea, tech., solid, dms., t.l., frt. alld. ... lb.	3.11	-
Ditridecyl phthalate, tanks, divd. ... lb.	.60	.63
Diundecyl phthalate, tanks, divd. . . lb.	.58	-
Divinylbenzene, 100% basis, tanks works ... lb.	2.75	2.60
dms, 100% basis ... lb.	3.00	2.70
l-Dodecanol, syn., tanks, f.o.b. ... lb.	.76½	-
Dodecenyl succinic anhydride, dms., c.l., t.l., divd. ... lb.	.88	-
Dodecylbenzene (see Detergent Alkylate).		
Dodecylphenol, tanks, min. frt. alld. E ... lb.	.48	.53
Dyes, coaltar, certified colors for food, drugs and cosmetics, 100 lb. and over. frt. prepaid or alld. .		
Blue, FD&C. No. 1 ... lb.	21.20	22.60
No. 2 ... lb.	29.15	29.22
Green, FD&C, No. 3 ... lb.	49.50	65.00
Red, FD&C, No. 3 ... lb.	24.00	24.50
Yellow, FD&C, No. 5 ... lb.	7.45	7.85
No. 6 ... lb.	6.45	6.75
Dyes, coaltar, certified colors for drugs and cosmetics, 100-lb. lots divd.		
Green, D&C, No. 5 ... lb.	38.50	-
No. 6 ... lb.	42.80	-
Red, D&C, No. 4 ... lb.	18.86	-
No. 17 ... lb.	38.90	-
No. 19 ... lb.	38.25	-
No. 22 ... lb.	12.45	-
No. 28 ... lb.	59.95	-
No. 33 ... lb.	48.95	-
Yellow, D&C. No. 7 ... lb.	21.00	-
No. 8 ... lb.	20.55	-
No. 10 ... lb.	46.80	46.85
No. 11 ... lb.	35.25	-
Dyes, coaltar, for general use in cloth and paper dyeing (by Color Index Name). f.o.b. works		
A Blk 1 Blue black ex. conc. ... lb.	5.75	-
Dyes, A Bl 9 Blue 2G ... lb.	5.46	-
A Bl 45 Alizarine Blu SAP 150% . lb.	19.85	-
A Bl 90 Alizarine Br. Cy G ... lb.	14.13	-
A Bl 113 Navy 5R ... lb.	6.55	-
A Gr 16 Gast 2G 333% ... lb.	22.12	-
A Or 7 11 ... lb.	3.72	-
A Or 8 RO Ex. Conc. ... lb.	4.00	-
A Or 10 Wool Or G ... lb.	4.30	-
A Or 74 Metallized Or GNA ... lb.	6.15	-
A R 2G ... lb.	5.13	-
A R 14 Azo Rubine 133% ... lb.	8.85	-
A R 18 Scarlet 4R Conc. ... lb.	5.45	-
A R 88 Fast Red A. Conc. ... lb.	6.85	-
A R 151 Silk Red 3B Conc. ... lb.	4.50	-
A V 17 5BNS Conc. ... lb.	9.75	-
AV 49 4BNS Conc. ... lb.	12.22	-
A Y 17 Fast Light Yell 2G. ... lb.	5.69	-
A Y 23 Tartrazine Ex Conc. ... lb.	6.18	-
B Bl 9 Zinc Free ... lb.	16.40	-
B Br 4 Bismark Brown R Ex. Conc. lb.	4.42	-
B G 1 Jade Crystals ... lb.	9.55	-
B Gr 4 Malachite Green Crystal. . lb.	6.90	-
B V 1 Methyl Violet Crystals ... lb.	6.80	-
B V 10 Rhodamine B Ex. ... lb.	10.95	-
B Y 2 Bond Yell SFA 150% ... lb.	10.10	-
D Bl 1 Sky Blue 6B Conc. ... lb.	4.62	-
Ex. Conc. 300% ... lb.	9.25	-
D Bl 8 Azurine G Conc. ... lb.	9.45	-
D Blk 22 Fast Black GR ... lb.	2.85	-
Fast Black GR 150% ... lb.	4.28	-
D Br 230 Resin Fast Brown BRNB 200% ... lb.	7.23	-
D Gr 28 Resin Fast Green GL ... lb.	9.15	-
D R 2 4B Ex. Conc. ... lb.	7.96	-
D R 31 Brilliant-Red 12B Conc. . lb.	6.16	-
D R 80 Fast Red 8BLN ... lb.	6.15	-
D R 81 Paper Red 8BLP ... lb.	6.65	-
D R 251 Fast Scarlet AV ... lb.	6.25	-
D Or 102 Fast Orange WSP Liq. . lb.	2.47	-
WS. Conc. 150% ... lb.	11.25	-
D Y 4 Brilliant Paper Yell 3GX 125% ... lb.	4.69	-
Brilliant Paper Yell 3GX Liq. ... lb.	1.75	-
D Y 11 Stilbene Yellow GA. Ex. Conc. ... lb.	3.03	-
D Y 41 Fast Yellow RGL Conc. 200% ... lb.	9.75	-
D Y 27 Resin Fast Yellow L5G ... lb.	14.40	-
Dis R 1 Scarlet BA ... lb.	4.28	-
Dis R 91 Pink REL 200% ... lb.	21.00	-
Dis Y 3 Yellow G ... lb.	3.65	-
Dis Y 54 Yellow 3G ... lb.	6.84	-
Dis Or 3 Orange GRA ... lb.	4.91	-
Dis Or 37 Orange OB ... lb.	3.77	-
Dis V 1 4RN Paste ... lb.	7.85	-
Dis V 26 Bordeaux BV 200% ... lb.	17.25	-
Dis Bl 27 Blue BGLF ... lb.	10.05	-
Dis Bl 102 Blue GFDA 300% ... lb.	22.80	-
50% Paste ... lb.	4.10	-
V G 1 Jade Green Double Paste . lb.	5.50	-
V Blk 25 Olive TA Paste ... lb.	5.85	-

E

Endrin, tech., 95-99%, dms., t.l. ... lb.	7.00	-
Ephedrine, syn. anhyd., USP, 80-oz. lots ... oz.	1.25	-
Ephedrine hydrochloride, NF, cryst., less than 1,000 kg. ... kilo	38.25	40.25
Ephedrine sulfate, USP, cryst., dms., less than 1,000 kilos ... kilo	43.00	45.25
Epichlorohydrin, tanks, divd ... lb.	.88	-

Epinephrine base, syn., USP, bots., 100-gram lots ... gram	.60	-
Epoxy resin, liquid, bulk tanks, divd. ... lb.	1.31	1.41
Solid, bgs., t.l. ... lb.	1.28½	1.33½
Epsom salt (see Magnesium sulfate).		
Erythorbic acid, powd., gran., 100 lb. dms., t.l. or mixed t.l. f.o.b. works ... lb.	4.10	4.25
Ester gum, gum-rosin type, dms., c.l., divd., Ill., Md., Ky., E. States, Minneapolis, N.C., Ohio, St. Louis, St. Paul, Va., W. Va. lb.	.75	-
Ester gum, wood-rosin type, dms., c.l., same basis ... lb.	.43	.48
Ethyl acetate, syn., 85-88%, tanks, divd. ... lb.	.41	.41½
99%, tanks, divd. ... lb.	.41½	.42½
Ethyl acetoacetate dms., c.l., divd. . lb.	1.13	-
tanks, divd ... lb.	1.05	-
Ethyl acrylate, tanks, frt alld ... lb.	.66	-
Ethyl alcohol, syn., 190 pf., USP tax free, tanks, divd. E. ... gal.	1.55	-

Ethyl alcohol, absolute, 200 pf., tax free prices 12c. higher than 190 pf., tax free.

Ethyl alcohol, fermentation, tanks, f.o.b. works ... gal.	1.06	1.28

Price range attributable to various state tax incentives.

Ethyl alcohol, denat. (see Denatured alcohol, ethyl).		
Ethyl p-aminobenzoate, NF (see Benzocaine).		
Ethyl benzoate, dms. ... lb.	1.35	1.50
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E. ... lb.	.76	-
Ethyl butyrate, dms. ... lb.	1.35	1.50
Ethyl cellulose, standard vis., 7 cps. bgs., t.l., frt. equald. E. ... lb.	4.55	-
standard vis., 10, 20, 45, 100 cps., t.l., frt. equald. E. ... lb.	4.17	4.22
medium vis., 50, 70, 100 cps., t.l., frt. equald. E. ... lb.	4.25	-
USP vis., 7 cps bgs., t.l., frt. equald. E ... lb.	4.88	-
USP 10,20,45,100 bgs., t.l., frt. equald. E ... lb.	4.59	4.69
VSP (medium) 50,70,100 bgs., t.l., Frt. equald. E. ... lb.	4.51	-
Ethyl chloride. tech., cyls., frt. alld. . lb.	.28	.28½
tanks, frt. alld ... lb.	.24	.26½
Ethyl cinnamate, dms ... kilo	41.00	-
Ethyl ethanolamines, mixed. dms., t.l., divd. E. ... lb.	1.23	-
tanks, divd. E. ... lb.	1.15	-
Ethyl ether, refined, tanks, f.o.b. ... lb.	.46	-
Ethyl hexanoate, dms. ... lb.	4.25	4.75
2-Ethylhexoic acid, dms., c.l., t.l., divd. E. ... lb.	.63	-
tanks divd. E. ... lb.	.57	-
2-Ethylhexyl acrylate, straight or mixed, tanks, frt. alld. E. . . lb.	.79.5	-
2-Ethylhexyl alcohol, tanks, divd. . . lb.	.35	-
Ethyl iodide, cbys., works ... lb.	6.25	-
Ethyl linalool, syn. 55-gal. dms. ... lb.	10.60	-
Ethyl linalyl acetate, syn., 55-gal. dms. ... lb.	10.65	-
Ethyl methacrylate, tanks, frt. equald ... lb.	1.06	-
n-Ethyl morpholine, dms., t.l., frt. alld ... lb.	2.00-	
tanks, same basis ... lb.	1.92	-
n-Ethyl-a-naphthylamine, dms., works ... lb.	1.04	-
Ethyl oxalate (see Diethyl oxalate).		
Ethyl parathion (see Parathion, ethyl).		
Ethyl silicate dist. (see Tetraethyl orthosilicate).		
Ethyl silicate, 40% available SiO_2, dms., t.l., f.o.b. works ... lb.	1 45	1.46
tanks, f.o.b. works ... lb.	1.39	-
N-Ethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. ... lb.	3.18	-
tanks, same basis ... lb.	3.10	-
N-Ethyl-o-toluidine, dms. ... lb.	2.85	2.90
Ethyl vanillin 100 lb. dms., 500 lbs. or more ... lb.	13.50	-
25 lb. dms., 500 lbs. or more ... lb.	13.75	-
100 lb. dms., less than 500 lbs. . . lb.	14.00	14.50
Ethylamine (see Mono-Di- and Tri-)		
N-Ethylaniline, dms., c.l., t.l., f.o.b. works ... lb.	1.66	-
tanks, same basis ... lb.	1.58	-
Ethylbenzene, bulk, f.o.b. Houston, Tex. ... lb.	.22	.23
Ethylene, contract, divd ... lb.	.18	.18½
Ethylene brassylate, dms. ... lb.	16.00	18.25
Ethylenediamine, 99%, tanks, f.o.b. works ... lb.	1.30	1.305
Ethylenediamine dihydriodide ... lb.	7.55	9.25
Ethylenediamine tetraacetic acid, tetrasodium salt, soln., t.c., t. t., frt. equald. ... lb.	.36½	-
Ethylene dibromide dms., c.l., frt., equald ... lb.	.38	.46
tanks, frt. equald ... lb.	.32	.42
Ethylene dichloride, tanks, f.o.b. works ... lb.	.17	.17¼
Ethylene glycol, indust., tanks, frt. alld ... lb.	.31	-
Ethylene glycol, monobutyl ether, tanks, divd. E. ... lb.	.41½	-
Ethylene glycol monoethyl ether, tanks, divd. E ... lb.	.51	-
Ethylene glycol monomethyl ether, tanks, divd. E ... lb.	.34	-
Ethylene glycol monobutyl ether acetate, tanks, frt. alld. E. ... lb.	.64½	-
Ethylene glycol monoethyl ether acetate, tanks, ft. alld. E. ... lb.	.55½	-
Ethylene glycol monomethyl ether acetate, tanks, frt. alld. E. ... lb.	.43	-
Ethylene oxide, tanks f.o.b. ... lb.	.35	.45
Ethylene trichloride (see Trichloroethylene).		
Eucalyptol, NF, dms. Portuguese . kilo.	7.50	-
Eucalyptus oil, Portuguese NF, rectified, 70-75%, dms ... kilo	5.50	-
NF, rectified, 80-85%, dms kilo	6.25	-
Eugenol, USP, dms. ... kilo	7.55	-

F

Fennel oil, sweet, USP, cns. ... kilo	9.00	-
Fennel seed, Egypt ... lb.	.33	-
Indian ... lb.	.57	.60
Ferric chloride anhyd., tech., 350-lb. dms., c.l., works ... 100 lbs.	36.00	-
Ferric chloride, 42 Be. photo grade dms., c.l., works ... 100 lbs.	9.10	-

Ferric chloride, sewage grade, 100 percent basis, f.o.b. works, tank works ... ton	176.00	255.00
Ferric nitrate, cryst., dms., t.l., f.o.b. lb.	.64	-
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works ... lb.	1.65	-
Ferric oxides (see Iron Oxides).		
Ferric phosphate, FCC g insoluble powder, dms, 10,000 lbs. ... lb.	1.10	1.15
Ferric pyrophosphate, soluble, purif., pearls, 50-lb. dm. ... lb.	1.11	-
Ferric resinate, precip., 6.75% Fe. dms., ton lots frt. alld. ... lb.	.45	-
Ferric sulfate, partly hydrated, 100-lb. bgs., c.l., works ... ton	141.00	-
bulk, works ... ton	117.00	-
Ferric ammonium citrate, NF, brown, green gran. 100 lb. dms., 2,000 lb. min., f.o.b. shipping pt. ... lb.	2.00	2.95

2c. per pound surcharge for shipments W. of Denver

Ferric-ammonium oxalate, fine gran., 250-lb. dms., t.l., f.o.b. works. E. ... lb.	.42	-
Ferric hydroxyethylene diaminetriacetic acid, industrial grade, sodium salt, soln., 4.5% Fe, t.c., t. t., f.o.b. works ... lb.	.55	-
agricultural grade, sodium salt solution, 5% Fe, t.c., t. t., f.o.b. works ... lb.	.64	-
Ferrous fluoborate liq. conc., dms., t.l., works, frt. equald ... lb.	.82½	-
Ferrous gluconate, NF, t.l., works E. lb.	2.25	-
Ferrous naphthenate, liq., 6%, Fe. dms., divd. ... lb.	1.17	-
Ferrous sulfate, moist, bulk, t.l. f.o.b. works ... ton	30.00	-
heptahydrate, gran., bulk, t.l., f.o.b. works ... ton	145.00	150.00
monohydrate, gran., bulk., t.l., f.o.b. works ... ton	170.00	180.00
USP, powd., 400-lb. dms. ... lb.	.49	-
cryst., 250-lb. dms. ... lb.	.61	-
Fir oil, Canada dms ... lb.	10.20	-
Siberia, dms. ... lb.	6.75	.75
Fish oil, refd., alkali, tanks, c.l. ... lb.	.29	-
kettle-bodied, tanks ... lb.	.32	.36
light, cold-pressed, dms., c.l. ... lb.	.34	-
tanks ... lb.	.26	-
Fishmeal, dom., menhaden, 60% protein grd., bulk, f.o.b. Atlantic port ... ton	295.00	-
f.o.b. Gulf port ... ton	280.00	-
Imp., Chilean, 65% protein min., bulk, c.l., t.l., ex whse., f.o.b. Atlantic and Gulf ports. . . ton.	285.00	-
Fluoboric acid, dms., t.l., works, frt. equald ... lb.	.91	-
Fluorocarbon, No. 11 bulk, tanks, delvd. ... lb.	.57	.64
No. 12, bulk, same basis ... lb.	.68	.74
No. 22, bulk, same basis ... lb.	1.05	1.14
No. 113, bulk, same basis ... lb.	.89	.93½
No. 114, bulk, same basis ... lb.	1.02	1.08
Fluosilicic acid (see Hydrofluosilicic acid).		
Fenugreek seed, Indian, bgs. ... lb.	.32	-
Formaldehyde, 37% methanol free (uninhibited) divd., gulf ... lb.	.088	.0905
44-45% (1% methanol) tanks, divd. ... lb.	.1015	.1065
37% (inhibited 7% methanol, divd. ... lb.	.0945	.1025
37% (inhibited 11-15% methanol) tanks, divd. ... lb.	.1055	.1060
Formamide, tanks, f.o.b. ... lb.	.39	-
dms., same basis ... lb.	.44	-
Formic acid 90% tanks, f.o.b. works ... lb.	.36½	-
95% dms., c.l., works ... lb.	.51½	-
Fructose, cryst., 18,000 kilos or more, dms. ... lb.	.90	1.03
Fumaric acid, food grade, bgs. t.l., frt. equald. E. ... lb.	.75½	.77½
tech. grade, bgs., t.l., f.o.b. frt. equald ... lb.		.62½
Furfural, tanks, f.o.b. Cedar Rapids, Iowa, and Belle Glade, Fla. lb.	.75	-
Furfuryl alcohol, tanks, f.o.b. Memphis, Tenn. and Omaha, Neb. . . lb.	.72	-

G

G salt, dms., frt. alld. 100% basis . . lb.	2.30	-
Gallic acid, 400-kilo lots ... kilo	23.05	-
Garlic oil, dms., Egyptian ... kilo	85.00	105.00
Gelatin, edible, 100 AOAC test, dms., l.t.l., divd. ... lb.	1.60	1.75
125 AOAC test, dms., l.t.l. ... lb.	1.75	1.85
150 AOAC test, dms., l.t.l. ... lb.	1.85	1.95
175 AOAC test, dms., l.t.l. ... lb.	1.95	2.05
200 AOAC test, dms., l.t.l. ... lb.	2.05	2.15
225 AOAC test, dms., l.t.l. ... lb.	2.10	2.25
250 AOAC test, dms., l.t.l. ... lb.	2.20	2.35
275 AOAC test, dms., l.t.l. ... lb.	2.30	2.45
300 AOAC test, dms., l.t.l. ... lb.	2.50	2.65
Gentian violet (see Methyl rosaniline chloride).		
Geraniol, syn., 90-92%, dms. ... lb.	5.25	-
nat., 90-92%, dms ... lb.	3.50	-
syn. 96-98%, dms. ... lb.	5.75	-
Geranium oil, Moroccan ... lb.	24.00	27.50
Bourbon ... lb.	33.00	38.00
Chinese ... kilo	70.00	85.00
Egypt ... lb.	53.00	-
Turkish (see Palmarosa oil).		
Geranyl acetate, dms. ... lb.	5.44	6.00
nat., dms. ... lb.	10.95	-
Geranyl formate, syn., dms. ... lb.	6.60	-
nat., dms. ... lb.	15.95	-
Gilsonite, g.p., bulk, c.l., f.o.b. Bonanza, Utah ... ton	160.00	-
selects, same basis ... ton	180.00	-
Ginger, Cochin, bgs. ... lb.	.65	-
Chinese sliced ... lb.	.65	.70
Ginger oil, African, dms. ... lb.	75.00	-
Indian ... kilo	70.00	85.00
Ginger oleoresin, NF, bots. ... lb.	30.00	-
Glauber's salt (see Sodium sulfate).		
Gluconic acid tech. 50% dms., c.l., t.l., f.o.b. works ... lb.	.50	-
tanks, same basis ... lb.	.44	-

CHEMICAL PRICES
WEEK ENDING JUNE 6, 1986

Glue, bone, extracted, green, jellygrams, bgs., c.l. ... lb.	-	-
85 jellygrams, bgs., c.l., f.o.b. . . lb.	.66	-
115 jellygrams, bgs., c.l., f.o.b. . . lb.	.76	-
135 jellygrams, bgs., c.l., f.o.b. . . lb.	.77	-
164 jellygrams, bgs., c.l., f.o.b. . . lb.	.79	-
192 jellygrams, bgs., c.l., f.o.b. . . lb.	.87	-
220 jellygrams, bgs. c.l. f.o.b. ... lb.	.93	-
Glue, hide,		
109 jellygrams, bgs., t.l., f.o.b. ... lb.	.80	-
135 jellygrams, bgs., t.l., f.o.b. ... lb.	.85	-
164 jellygrams, bgs., t.l., f.o.b. ... lb.	.90	-
192 jellygrams, bgs., t.l., f.o.b. ... lb.	.95	-
222 jellygrams, bgs., t.l., f.o.b. ... lb.	1.00	-
251 jellygrams, bgs., t.l., f.o.b. ... lb.	1.05	-
283 jellygrams, bgs., t.l., f.o.b. ... lb.	1.10	-
315 jellygrams, bgs., t.l., f.o.b. ... lb.	1.15	-
347 jellygrams, bgs., t.l., f.o.b. ... lb.	1.20	-
379 jellygrams, bgs., t.l., f.o.b. ... lb.	1.25	-
411 jellygrams, bgs., t.l., f.o.b. ... lb.	1.30	-
444 jellygrams, bgs., t.l., f.o.b. ... lb.	1.35	-
477 jellygrams, bgs., t.l., f.o.b. ... lb.	1.40	-
Glutamic acid, 99½% dms., 100-lb. lots, frt. alld. ... kilo	6.65	-
Glycerine, nat., refd., USP, CP 99½% tanks, divd. ... lb.	.89½	-
USP, CP, nat. 96%, tanks, divd. . lb.	.87¼	-
Syn. 96%, tanks divd. ... lb.	.89¼	-
Syn. 99.5%, tanks divd. ... lb.	.91	-
Glycine (see Aminoacetic acid).		
Glyceryl guaiacolate. 100-lb. fib. dms. f.o.b. ... kilo	14.50	-
Glycolic acid (see Hydroxyacetic acid)		
Glyoxal 40% soln., bulk, tanks, divd. ... lb.	.44½	-
Grapefruit oil, Fla., dms. ... lb.	1.25	1.40
Calif., dms. ... lb.	3.45	-
Israeli ... lb.	1.40	2.00
Graphite, amorph, powd., bgs., dms., ex whse. ... lb.	.16	.40
cryst., 88-90%, powd., bgs., dms., ex whse. ... lb.	.30	.60
Graphite, cryst., 90-92%, powd., bgs., dms., ex whse. ... lb.	.40	.75
95-96% powd., bgs., dms., ex whse. ... lb.	.60	.90
Graphite, amorph., cryst., 97% and up, powd., bgs., dms., ex whse. ... lb.	.80	1.20
Graphite, flake, No. 1, 90-95%, bgs., dms., ex whse. ... lb.	.65	.75
No. 2, 90-95%, bgs., dms., ex whse. ... lb.	.65	.75
Grease (See Oils, Fats & Waxes market report)		
Grease oil (See Lard oil).		
Guaiacol, tech., 500-lb dms., 24,000 lb. min., f.o.b. Wallingford, Conn. ... lb.	2.70	-

NOTE: Purified grades are 10c. higher

Guaiacwood oil, dms. ... lb.	2.50	-
Guar gum, edible, bgs., c.l., f.o.b. ship't. pt. ... lb.	.50	.75
Indust., bgs., high viscosity, c.l., same basis ... lb.	.50	.85

H

Heliotropin, dms. ... lb.	8.00	8.25
Hemlock oil (see Spruce oil).		
Henbane leaves, bls. ... lb.	.56	-
Heptachlor dms., c.l., t.l., frt. alld., 100% basis ... lb.	4.55	-
Heptane, indust., tanks, f.o.b. Beaumont, Tex. ... gal.	1.07	-
95%, tanks, f.o.b. Houston, Tex. ... gal.	1.18	-
Heptanoic acid, syn., tanks, f.o.b. ...	.65	-
l-Hexadecanol, syn., tanks, f.o.b. . . lb.	.43½	-
Hexahydrophthalic anhydride, tech. dms., l.t.l., f.o.b. works ... lb.	1.42	-
Hexamethylenetetramine, gran. bgs., c.l., t.l., works ... lb.	.55	-
gran. dms., c.l., t.l., works . . lb.	.59	-
pdr. bgs., c.l., t.l., works ... lb.	.60	-
powd. dms, c.l., t.l., works . . lb.	.63	-
Hexane, indust., tanks, works ... gal.	1.01	1.15
95%, tanks, f.o.b. Houston, Tex. ... gal.	1.12	-
l-Hexanol, syn., tanks, f.o.b. ... lb.	.50	-
Hexyl alcohol, mixed isomers, tanks ... lb.	.32	-
p-Hexyl methacrylate, dms., c.l., works ... lb.	.75½	-
Hexylene glycol, tanks, divd ... lb.	.50	-
Hexylresorcinol, USP, dms., 25-lb. lots or more, frt. alld. ... lb.	30.00	-
Homatropine hydrobromide, USP, 10-100-oz. lots, bots. ... oz.	10.25	11.30
Homatropine methylbromide, USP, 10-250 oz. lots, bots. ... oz.	9.70	10.70
Horehound herb, bls. ... lb.	.25	.26
Hydrazine hydrate, 85%, t.t., frt. alld. ... lb.	1.54	-
55-gal. dms., t.l., frt. alld ... lb.	1.61	-
Hydriodic acid, purif., 47%-57%, 2-cbys., f.o.b. works ... lb.	7.50	-
Hydroabietyl alcohol, tech., solid. dms., c.l., f.o.b. zone 1 ... lb.	.65	-
tanks, f.o.b. zone 1 ... lb.	.60	-
Hydrobromic acid, 48% dms., c.l., t.l., f.o.b. ... lb.	.36½	-
Hydrochloric acid, anhyd. (see Hydrogen chloride).		

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

Hydrochloric acid, 20° Be, tanks, works, East ... ton	55.00	65.00
Midwest ... ton	60.00	70.00
Gulf Coast ... ton	57.00	-
West Coast ... ton	90.00	105.00
22° acid, same basis, East ... ton	68.00	78.00
Midwest ... ton	68.00	70.00
Gulf Coast ... ton	63.50	-
West Coast ... ton	100.00	115.00
NOTE: Prices vary and are either freight collect (freight equalized depending on producer and location.		
steel-makers, grade, 20°, divd. ... ton	38.00	42.00
Hydrocortisone acetate, micronized, dms., 25 kilos or more . gram.	.70	-
Hydrocortisone, alcohol, micronized, dms., 25 kilos or more . gram.	.70	-
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)		
Hydrofluoric acid, aqueous. 70% tanks., f.o.b. frt. equald. ... 100 lbs.	43.00	-
Hydrofluosilicic acid, 15-gal. dms., t.l., works, 30% basis ... ton	151.00	-
tanks, 100% basis, works ... ton	100.00	140.00
Hydrogen bromide, anhyd. cyls., extra, 30,000-lbs., f.o.b. works . lb.	7.00	-
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works ... lb.	.65	-
600-lb. cyls., c.l., same basis . lb.	.62	-
Hydrogen chloride, anhyd., tube trailers, seller's trailer, min. 100,000 lbs. a year ... lb.	.37	-
tube trailers, buyer's trailer ... lb.	.27	-
Hydrogen chloride anhyd., tanks, works ... ton	270.00	-
Hydrogen cyanide, liq., 99.5%, tanks, works ... lb.	.60	-
Hydrogen fluoride, anhyd., tank cars c.l., f.o.b., frt. equald. ... lb.	.6875	-
Hydrogen peroxide, 35% tech., tanks, works, ft. equald ... lb.	.2325	-
50% tankcars, frt. equald ... lb.	.3225	-
70%, tankcars frt. equald ... lb.	.45	-
Hydrogen sulfide, liq., 99.25% min. seller's tanks, works ... lb.	.11	-
75 lb. cylinders ... lb.	1.75	-
Hydroquinone, photo grade, consumers. c.l., t.l., divd ... lb.	2.54	-
tech., dms. c.l., divd ... lb.	1.95	-
Hydroxyacetic acid, tech., 70%, tanks, Belle, W. Va. ... lb.	.49½	-
Hydroxylammonium sulfate, dms., t.l., f.o.b. ... lb.	.83	-
p-Hydroxybenzene sulfonic acid (see p-Phenolsulfonic acid).		
Hydroxybutyl methylcellulose (visc. 12,000 cps.) 50 lb. bags, tl., cl. 30,000 lb. min., divd., zone 1 ... lb.	2.10	-
Hydroxycitronellal dimethyl acetal, dms ... lb.	16.55	-
p-Hydroxydiphenylamine, dms., t.l., f.o.b. works ... lb.	4.10	-
Hydroxycitronellal, natural, dms ... lb.	9.40	-
pure, dms ... lb.	13.60	-
extra grade, dms ... lb.	14.80	-
syn., dms ... lb.	9.50	-
Hydroxyethyl cellulose, t.l., divd ... lb.	2.07	2.12
Hydroxyethyl methylcellulose (visc. 5,000 through 45,000 cps.) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.73	-
Hydroxypropyl methylcellulose, premium, U.S.P. (visc. 4,000 through 15,000) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.87	-
Hydroxypropyl methylcellulose, U.S.P (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.99	-
Hydroxypropyl methylcellulose (visc. 4,000 through 15,000 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.17	-
Hydroxypropyl methylcellulose (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.64	-
8-Hydroxyquinoline (see Oxyquinoline)		
Hypophosphorous acid, purif., 50% dms., c.l., works ... lb.	3.15	-

I

Ichthammol, NF, 200-kilo dms ... lb.	4.25	4.50
Iminodiacetic acid, 96% min., dms., c.l., t.l., works ... lb.	3.00	-
Indole, dms ... lb.	25.50	-
Inositol, 50-kilo dms., 1000 kilos or more, f.o.b. works ... kilo	17.50	22.00
Iodine, crude, dms ... kilo	13.50	18.00
Iodine USP ... lb.	14.21	14.59
Iodochlorhydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. alld ... kilo.	35.00	45.00
Iodoform, NF, dms., 300-lbs., f.o.b. works ... lb.	24.00	-
a-Ionone, dms ... lb.	18.20	-
b-Ionone, dms ... lb.	13.10	-
Ipecac root, whole, bgs ... lb.	25.00	-
Irish moss, bleached, prime, whole ... lbs.	.55	.60
Iron blue, alkali-resistant, bgs., l.c.l., ton lots, div. E ... lb.	2.70	-
Iron blue, reg., bgs., l.c.l., ton lots, same basis ... lb.	2.00	2.15
Iron, purif., powd., pails, 10-100-lb. lots ... lb.	1.00	-
Iron oxide, black, syn., bgs., c.l., frt. equald ... lb.	.38¼	.44
Iron oxide, brown, syn., bgs., c.l., frt. equald ... lb.	.36	.44¼
Iron oxide, metallic brown, l.c.l., bgs., frt. equald ... lb.	.13	.15
Iron oxide, nat., red., dom., pure, bgs., c.l., works ... lb.	.435	-
Iron oxide, yellow ... lb.	.18	-
syn., bgs., c.l., frt. equald ... lb.	.4275	-
Iron oxide, buff, nat., dom, bgs., c.l., t.l., works, light ... lb.	.055	-
dark ... lb.	.044	-
other shades, bgs., c.l., frt. equald ... lb.	.34½	.36½
Isatoic anhydride, bgs., f.o.b. works lb.	1.40	-
Isoamyl alcohol, 95% tanks, frt. alld. E ... lb.	.80	-
Isoborneol, 100 lb. dms ... lb.	7.25	-
Isobornyl acetate, dms ... lb.	.80	1.15
Isobutyl acetate, solvent grade, tanks, frt. alld ... lb.	.45	.48
Isobutyl acrylate, tanks, frt. alld. E. . lb.	.71	-
Isobutyl alcohol, tanks, divd ... lb.	.29	-
Isobutylene, 99%, tanks, f.o.b. works ... lb.	.32	-
Isobutyl isobutyrate, tanks, f.o.b. works ... lb.	.42½	-
Isobutyl methacrylate, tanks, divd. . lb.	.87	-
Isobutyl phenylacetate, dms ... lb.	3.10	3.50
Isobutyl salicylate, dms ... lb.	3.45	-
Isobutyraldehyde, tech., dms., c.l., divd ... lb.	.43	-
tanks, divd ... lb.	.35	-
Isobutyric acid, dms., c.l., t.l., divd. . lb.	No Prices	
tanks, same basis ... lb.	.75	
Isobutyronitrile, dms., c.l., f.o.b. works frt. collect ... lb.	.84	-
tanks, same basis ... lb.	.75	-
Isoeugenol, dms ... lb.	5.20	5.60
Isoniazid, powd ... kilo	12.00	-
Isonicotinic acid, hydrazine (see Isoniazid).		
Isononyl alcohol, dms., t.l ... lb.	.48	-
Iso-octyl alcohol, tanks, divd ... lb.	.44	-
Isophorone, tanks divd ... lb.	.61	-
Isophthalic acid, 99%, bulk, f.o.b., Joliet, Ill., min. frt. alld ... lb.	.46	-
Isophthalonitrile, bgs., t.l., works ... lb.	2.65	-
Isopropyl acetate, tanks, divd ... lb.	.47	-
Isopropyl alcohol, anhyd., 99%, tanks, divd ... gal.	1.38	-
refd., 95%, tanks, divd ... gal.	1.31	-
refd., 91%, tanks, divd ... gal.	1.25	-
Isopropyl ether, tanks, divd ... lb.	.44	-
crude, tanks, divd ... lb.	.37	-
Isopropylamine. (see Mono-, Di- or Tri-).		
Isopropyl myristate, dms., t.l., E ... lb.	1.19	1.50
Itaconic acid, refd. bgs t.l ... lb.	1.45	1.48

J

J acid, paste, dms., works, 100% basis ... kilo	4.75	-
Japan wax, cs ... lb.	5.50	5.60
Jojoba oil, 55-gal. dms., f.o.b. Arizona producing point ... gal.	55.00	60.00
Juniper berry oil, Italian ... kilo	47.00	-

K

Kaolin, water washed, fully calcined, bags c.l., f.o.b. Georgia .. ton	255.00	-
NF pwd., colloidal, bacteria controlled, 50 lb. bags, 5,000 lb. lots ... lb.	.24	-
Kaolin, uncalcined. No. 1 coating, bulk, c.l., f.o.b., Georgia ... ton	94.00	-
No. 2 coating ... ton	75.00	-
No. 3 coating ... ton	73.00	-
No. 4 coating ... ton	70.00	-
filler, gen.l purpose, same basis ... ton	58.00	-
delaminated water washed, uncalcined paint grade 1 micron avg., same basis ... ton	182.00	-
dry-grd. airfloated soft, same basis ... ton	60.00	-
Karaya gum, No. 1, powd., bbls ... lb.	2.25	-
No. 2, powd., bbls ... lb.	1.95	-
Kola nuts, bgs ... lb.	.49½	.51

L

Lacquer diluent petroleum, 140F.-200F. b.r., t.c., New Jersey and New York ... gal.	1.25	-
Houston, Texas ... gal.	1.29	-
Lacquer diluent, petroleum 200F.-240F. b.r., tankcars, New York and New Jersey ... gal.	1.20	1.25
Houston, Tex ... gal.	1.12	-
Lactic acid, food grade 88%, t.c., f.o.b. works ... lb.	1.06	-
50%, t.c., frt. equald ... lb.	.62	-
tech., 88%, t.c., frt. equald ... lb.	1.03	-
Lactose, edible, reg. bgs., c.l., works ... lb.	.22	.28
Lactose, ferment grade, bgs., c.l., works ... lb.	No Prices	
Lactose, USP, reg. dms., c.l., t.l., frt. equald ... lb.	No Prices	
USP, reg. dms., 10,000-lb. to t.l. lots, frt. equald ... lb.	.55	.59
Lactose, USP, spray dried, bgs., t.l., frt. equald ... lb.	No Prices	
bgs., 10,000-lb. to t.l. lots, frt. equald ... lb.	.60	-
	No Prices	
Lake C, red toner. (red 53) bbls., frt. alld ... lb.	5.70	-
Lanolin, anhyd., cosmetic. 400-lb. dms., works ... lb.	1.00	1.06
pharmaceutical, 400-lb. dms. works ... lb.	1.05	1.08
tech., (under 2% f.f.a.), 400-lb. dms., works ... lb.	.94	1.04
Lard (See Oils, Fats & Waxes market report.)		
Lard oil, No. 1, dms., c.l., f.o.b ... lb.	.34	
tanks, same basis ... lb.	.28	
Lard oil, extra, winter-strained, dms., c.l ... lb.	.41	-
tanks, same basis ... lb.	.33	-
prime, burning, dms., c.l., same basis, Chicago ... lb.	.43	-
prime, burning, tanks, same basis ... lb.	.35	-
NOTE: 300 Mi. rad. 1¼c. higher, except Texas, 2c., and West Coast, 3c. higher.		
Laurel leaves, Turkish ... lb.	.60	.68
Laurent's acid, drums, f.o.b ... lb.	3.85	-
Lauric acid, coml., pure bgs., c.l ... lb.	.65	.71
Lauric aldehyde (aldehyde C-12). dms ... lb.	7.75	-
n-Lauryl methacrylate, dms., c.l., t.l., works ... lb.	1.72	-
Lavandin oil, Abrialis, 30-32%, dms. lb.	4.00	-
Lavender flowers, ord ... lb.	.65	.75
medium, bls ... lb.	.80	.90
select. bls ... lb.	1.10	1.19
Lavender flower oil, NF, French, 40-42%, ester, cns ... lb.	9.25	13.50
spike, Spanish, dms ... kilo	15.00	22.00
Lead acetate, purif., flake. 400-lb. dms., works ... lb.	.46	-
tech., flake, t.l., 400lb. dms., works ... lb.	.37	-
Lead blue, basic, sulfate, bbls., c.l., ship.t. pt., f.o.b ... lb.	.87	-
Lead carbonate. (see Lead white basic carbonate).		
Lead chloride, 400-lb. dms., works. lb.	3.25	-
Lead dioxide, tech., powd., 200-lb. dms., t.l., works ... lb.	.66	.70
Lead fluoborate, liq. conc., dms., t.l., works, frt. equald ... lb.	.84	.87
Lead metal, divd ... lb.	.18	.18½
Lead monosilicate, milled, bgs., c.l., f.o.b. works ... lb.	.58½	-
coarse, bgs., c.l., same basis ... lb.	.57½	-
Lead naphthenate liq., 24% Pb. dms., frt. alld ... lb.	.93	-
Lead nitrate tech., cryst., 400-lb. dms., t.l., works ... lb.	.32½	-
Lead peroxide (see Lead dioxide).		
Lead red, 95% Pb_3O_4, or less, bgs. c.l., works ... lb.	.37	-
Lead red, 97% Pb_3O_4, bgs. c.l., works ... lb.	.37½	-
Lead, red, 98% Pb_3O_4, bgs., c.l., same basis ... lb.	.37½	.40½
Lead silicate (see Lead, white, basic silicate).		
Lead silicochromate, bgs., c.l., works ... lb.	.35	-
Lead sulfate (see Lead, blue, basic sulfate and Lead, white, basic sulfate)		
Lead, white, basic carbonate, bgs., c.l., frt. alld ... lb.	.62	-
Lead, white, basic, silicate, bgs., c.l., same basis ... lb.	.67	-
Lead, white, basic sulfate, bgs., c.l., same basis ... lb.	.85	-
Lecithin, edible, tech., bleached, non-ret. dms., l.c.l., works ... lb.	.36	-
unbleached non-ret. dms., l.c.l., same basis ... lb.	.34	-
edible, tech, bleached, non-ret., dms., t.l., works ... lb.	.28	-
unbleached, non-ret., dms., t.l., same basis ... lb.	.26	-
Lemon oil, Argentina ... kilo	14.00	-
Brazil ... lb.	6.50	7.00
Calif., USP, dms ... lb.	9.00	9.35
Italian ... lb.	11.60	-
Lemongrass oil, Indian, dms ... kilo	11.25	-
Guatemalan, dms ... lb.	2.25	-
dl-Leucine, dms., 1 kilo works ... kilo	60.00	90.00
Licorice root, whole, bls ... lb.	.40	.50
gran., bls ... lb.	.70	.90
powd., bls ... lb.	.95	-
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).		
Lime, chemical, pebble (quicklime), bulk, 50,000 lbs., works, f.o.b. plants ... ton	39.00	45.00
Lime, chemical, hydrated, bulk, same basis ... ton	46.00	50.00
bgs., same basis ... ton	54.00	57.00
Lime, NF, purif., 100-lb. dms ... lb.	.69	-
Lime oil, dist., Mexican, dms ... lb.	6.00	-
Haitian, dist., dms ... lb.	8.00	-
expressed, dms ... lb.	17.50	-
Lime salts (see Calcium).		
d-Limonene, dms ... kilo	.70	.85
Linalool ex bois de rose oil, dms ... lb.	6.35	-
syn., 98-100% dms., works ... lb.	2.90	3.05
Linalool oxide, syn., 55-gal. dm ... lb.	7.75	-
Linalyl acetate ex bois de rose oil, 90-92%, dms ... lb.	18.00	21.00
syn. 98-100%, dms., works ... lb.	2.80	3.15
Linalyl benzoate, syn., 55-gal. dms. lb.	8.00	-
Linalyl cinnamate, syn., 55-gal. dms ... lb.	59.85	-
Linalyl formate, syn., 55-gal. dms .. lb.	7.75	8.50
Linalyl isobutyrate, syn., 55-gal. dms ... lb.	6.50	6.55
Lindane, 25% formulation, to distributors, dms., frt. alld ... lb.	3.50	-
99.9% tech., f.o.b. Niagara Falls, N.Y., 250-lb. dms., t.l ... lb.	9.00	-
Linalyl propionate, syn., 55-gal. dms ... lb.	7.90	-
Linden flowers, with leaves, bls ... lb.	.78	.85
without leaves, bls ... lb.	.90	1.15
Linseed meal (see Oils, Fats & Waxes market report).		
Linseed oil, (see Oils, Fats & Waxes market report)		
Linseed oil fatty acid, dist., dms ... lb.	.60	.67
tanks ... lb.	.53	.62
Litharge, coml., powd., bgs., c.l., works ... lb.	.36½	.60
Lithium bromide, anhyd., dms., ton lots, divd ... lb.	6.27	-
soln., same basis ... lb.	4.00	-
Lithium carbonate, powd., bgs., c.l., t.l., divd ... lb.	1.50	-
Lithium chloride, anhyd., c.l., t.l., divd ... lb.	3.32	-
soln.; dms., c.l., t.l., divd ... lb.	2.94	-
Lithium fluoride, dms., c.l., t.l., divd. lb.	4.90	-
Lithium hydride, c.l., t.l., divd. 10,000 or more ... lb.	23.50	-
Lithium hydroxide, monohydrate, dms., c.l., t.l., divd ... lb.	1.93	-
Lithium hypochlorite, c.l., t.l., works lb	1.07	-
Lithium metal, 1,000-lb. lots or more, divd ... lb.	22.70	-
Lithium nitrate, tech., dms., 100-lb. lots ... lb.	3.25	-
Lithium stearate; bgs., c.l., frt. alld. . lb.	1.01	-
Lithium sulfate, anhydrous, t.l. divd lb.	3.09	-
Lithol red toner, barium, dms., frt. alld ... lb.	3.27	-
calcium, dms., same basis ... lb.	3.50	-
Lithol rubine toner (red 57), resinated, dms., frt. alld ... lb.	5.60	-
Locust bean gum, powd., bgs ... lb.	6.00	6.75
2,4-Lutidine, dms., t.l., frt equald kilo	5.75	-
Lycopodium, 50-lb. dms ... lb.	8.00	10.00
1-Lysine monohydrochloride, feed grade, 10,000 lbs. divd ... lb.	1.35	1.40

M

Mace, East Indian, siftings ... lb.	4.60	-
Siauw #2 ... lb.	4.60	-
Magnesia, tech., light, neoprene-grade, bgs., c.l., t.l., works lb.	.75	.81
Magnesia, syn., tech., chemical-grade, bulk, c.l., t.l. works ... ton	330.00	-
bags, c.l., t.l., same basis ... ton	365.00	-
deadburned, bulk, same basis ... ton	392.00	-
bgs., same basis ... ton	409.00	-
Magnesia, nat., tech., heavy, 85%, 150 mesh, bulk, c.l., t.l., f.o.b. Nev ... ton	232.00	-
90%, 325 mesh, same basis .. ton	265.00	-
Magnesium bromide, 80-lb. dms., hexahydrate ... lb.	2.50	-
Magnesium carbonate, light, tech., bgs., c.l., t.l., works, frt equald ... lb.	.73	.78
USP, lite bgs., c.l., same basis ... lb	.74	.80
USP, heavy, bgs., c.l., same basis . lb.	.83	-
Magnesium chloride, anhyd., 92%, flake or pebble dms., c.l., works ... lb.	.12¾	.15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ... lb.	.14½	-
Magnesium gluconate, 100-lb. dms. f.o.b. works, E ... lb.	4.25	-
Magnesium hydroxide, NF, powd., dms., c.l., t.l., works frt. equald ... lb.	.78	-
Magnesium lauryl sulfate, tanks, f.o.b. works ... lb.	.22	.26½
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more. f.o.b. Freeport, Tex ... lb.	1.53	-
die casting alloys ... lb.	1.29	1.33
Magnesium nitrate, tech., flake. 250-lb. dms., t.l., works ... lb.	.32	-
Magnesium oxide, USP, light, bgs., c.l., works, frt. equald ... lb.	1.65	-
heavy, dms., c.l., same basis ... lb.	1.54	-
Magnesium oxide, tech. (see Magnesia).		
Magnesium phosphate, tribasic, tech. 60-lb. bgs., f.o.b ... lb.	1.00	-
Magnesium silicate (see Talc).		
Magnesium silicofluoride, bgs., c.l., t.l. works ... lb.	.1645	.1800
Magnesium stearate, bulk, t.l ... lb.	.95	1.36
Magnesium sulfate 10% Mg. tech. bgs., mixed c.t., 10,000-lb. min., works ... 100 lbs.	13.60	14.65
bulk, same basis ... 100 lbs.	11.50	-
USP, cryst., bgs., mixed c.l., 10,000-lb. min., works ... 100 lbs.	14.35	15.40
Magnesium sulfate, 17% Mg, tech. bgs. (synthetic monohydrate) t.l., 30,000 lb. min., works ... 100 lbs.	18.25	-
bulk, c.l. 100,000 lb. min. works ... 100 lbs.	17.50	-
Magnesium sulfate, 17% Mg. CP t.l. 30,000 lb. min, works 100 lbs.	19.25	-
bulk, c.l. 100,000 lb. min., works ... 100 lbs	18.50	-
Magnesium trisilicate, USP, powd., fib. dms. 5,000-lb. lots ... lb.	.38	-
USP, micronized powd., dms., 375-lb. lots ... lb.	.63	-
Malathion, tech., dms., t.l., works. . lb.	1.62	-
Maleic acid, cryst., powd., drums, 100 kilos, f.o.b ... kilos	3.20	-
drums, tons, f.o.b ... kilos	2.80	-
Maleic anhydride, bgs., t.l., works, frt. equald ... lb.	.55	.59
tanks, works, frt. equald ... lb.	.53	-
Malic acid, purif, and food grades, 50-lb. bgs., t.l., c.l., divd ... lb.	.81	.84
Mandarin oil (see Tangerine oil, Italian).		
Mandelic acid, dms., 1,000 kilo lots ... kilo	8.00	10.00
Manganese acetate, dihydrate, dms., divd ... lb.	.43½	.48
tetrahydrate, dms., t.l., divd ... lb.	.48	-
Manganese borate printing ink drier. lb.	1.68	1.80
Manganese borate, tech., dms ... lb.	.60	-
Manganese carbonate, chemical grade, 46% Mn. bgs., 20,000-lb. lots or more, works ... lb.	1.05	-
Manganese chloride, anhyd., dms., 20,000-lb. lots or more ... lb.	.61	-
Manganese dioxide, nat., African, grd., 74%-76% MnO_2, 100-lb. bgs., l., works ... ton	200.00	-
84% MnO_2, same basis ... ton	250.00	360.00
Manganese dioxide, syn., cryst., battery grade, 90%-92% MnO_2, 100-lb. bgs., c.l., works. . lb.	.70	.87½
chemical, ferrite grade, same basis ... lb.	.49	.81
Manganese gluconate, FCC grade, 100-lb dms., f.o.b. works ... lb.	3.50	.88
Manganese hydrate dms., divd ... lb.	.35	-
Manganese hypophosphite, NF, dms. ... lb.	8.75	-
Manganese metal, electrolytic, No. 1 chip, bulk, c.l., works ... lb.	.33¼	-
dms., c.l., works ... lb.	.8435	-
Manganese naphthenate, liq., 6% Mn, dms., divd ... lb.	.67	-
Manganese resinate, fused, 3½% Mn. dms., frt. alld ... lb.	.34¼	-
precip. 6½-7% Mn. dms ... lb.	.42	-
Manganese sulfate, fertilizer grade, run-of-pile, 75%-78% $MnSO_4$, 25 kilo bgs., 50-ton cars, divd. E. of Miss ... ton	170.00	-
bulk, hopper cars, same basis .. ton	145.00	-
Manganese sulfate, 28% Mn, gran., bgs., c.l., t.l., works ... ton	300.00	-
Manganese tallate, liq., 6% Mn, dms., frt. alld ... lb.	.60	-
Mannitol, coml., powd., dms., t.l., works ... lb.	3.02	-
Marjoram, French ... lb.	.84	-
Egyptian ... lb.	.48	.72
MBT (see 2-Mercaptobenzothiazole).		
MBTS (see Mercaptobenzothiazyl disulfide).		
MDI (see Diphenylmethane 4,4,-di-isocyanate)		
Melamine, bgs., c.l., t.l., 40,000-lb. min., f.o.b. works ... lb.	.51½	.59½
bulk, c.l., t.l., same basis ... lb.	.50	.58
Melamine-formaldehyde resin, g.p., t.l. frt. alld ... lb.	.55	.60
molding compounds, same basis ... lb.	.46½	-
Menhaden oil, crude, tanks, works Atlantic Coast ... lb.	.14	.15
Gulf ports, same basis ... lb.	.14	.15
Menthol, nat., USP, Brazilian large and regular crystals, spot, cs., bulk ... lb.	6.75	7.50
syn., USP, racemic, 100-450 lbs. lb.	9.00	-
2-Mercaptobenzothiazole, bgs., t.l., works, frt. alld ... lb.	1.25	1.55
Mercaptobenzothiazyl disulfide t.l., dms., works, frt. alld ... lb.	1.33	1.66
Mercuric chloride NF, gran., powd., 100-lb. dms., f.o.b. works . lb.	6.60	-
Mercuric oxide, red, purif., 100-lb. dms., f.o.b. works ... lb.	7.00	7.25
tech., 100-lb. dms., same basis ... lb.	5.50	7.00
yellow, NF, 100-lb. dms., same basis ... lb.	7.00	7.25
tech., 100-lb. dms., same basis ... lb.	5.50	7.50
Mercurous chloride (see Calomel).		
Mercury, ammoniated (see White precipitate USP XV).		
Mesityl oxide, tanks, divd ... lb.	.46	-
Methacrylic acid, glacial, 99%, dms., t.l., frt. equald ... lb.	.87	-
tanks, works, frt. equald ... lb.	.78	-
d-Methamphetamine hydrochloride, dms ... lb.	12.00	16.00
dl-Methamphetamine hydrochloride, dms ... lb.	4.50	7.00
Methanol, syn., tanks, 4,000 gals., f.o.b. producing point, Gulf Coast ... gal.	.52	.71½
Methenamine (see Hexamethylenetetramine).		
Methionine hydroxyanalogue, dry, 86% activity t.l., frt. alld ... lb.	.86	-
liquid, 88% activity, t.l. frt. alld ... lb.	.86	-
dl-Methionine (see Racemethionine)		
Methoxychlor, 50% wettable powder, dealers, dms ... lb.	2.05	-
Methyl abietate, non-ret. dms., c.l., divd. E ... lb.	9.40	-
Methyl abietate, hydrogenated, non-ret. dms., l.c.l., same basis ... lb.	10.00	-
Methyl acetoacetate, East, divd. bulk ... lb.	.85	-
Methyl acrylate, tanks, divd ... lb.	68.50	-
Methyl alcohol (see Methanol)		
Methyl amyl alcohol, tanks, divd ... lb	.55	-
Methyl n-amyl ketone, tks., divd ... lb	.54½	-
Methyl anthranilate, tech., dms., f.o.b ... lb.	1.41	2.65
Methyl benzoate, dms., t.l ... lb.	.25	-
99.9%, perf. grade, dms., t.l ... lb.	1.65	-
Methyl bromide, dist., tanks, 140,000 lbs. min., frt. alld ... lb.	.56¾	-
Methylcellulose, premium, USP (visc. 400 through 4,000 cps) 50 lb. bags, tl., cl., 30,000 lb., min., divd., zone 1 ... lb.	2.73	-
Methylcellulose, premium USP (visc. 15 cps) 50 lb. bags, tl., cl., 30,000 lbs., divd., zone 1 . . lb.	2.85	-
Methylcellulose, (visc. 400 through 4,000 cps) 50 lb. bgs., tl., cl., 30,000 lbs., divd., zone 1 ... lb.	2.24	-
Methylcellulose (visc. 15 to 25 cps) 50 lb. bags, tl., cl., 30,000 lb. min., divd., zone 1 ... lb.	2.52	-
Methyl chloride, indust. bulk, tanks, f.o.b. works ... lb.	.26	-
Methyl chloroform (see 1,1,1-Trichloroethane).		
Methyl cinnamate, dms ... lb.	4.65	-
Methyl p-cresol, dms ... lb.	6.00	-
Methyl ethyl ketone, tanks, divd, E. lb.	.235	-
Methyl eugenol, 25-lb. cns ... lb.	3.55	3.80
Methyl formate, pure, non-ret. dms., works ... lb.	.41	-
tanks, same basis ... lb.	.29	-
tech., tanks, works ... lb.	.31	-
Methyl heptenol, syn., 55-gal. dms. lb.	14.50	-
Methyl heptenone, pure, dms ... lb.	7.30	-
Methyl heptin carbonate, dms ... lb.	45.00	-
Methyl p-hydroxybenzoate (see Methylparaben)		
Methyl ionone, std., dms ... lb.	7.30	9.40
Methyl isoamyl ketone, tanks, divd E ... lb.	.51	-
Methyl isobutyl carbinol (see Methyl amyl alcohol).		
Methyl isobutyl ketone, tanks, divd. lb.	.35	-
divd. zone 2 (Calif.) ... lb.	.38	-
divd. zone 3 (W. of Rockies, excluding Calif.) ... lb.	.41	-
Methyl isoeugenol, 25-lb. cns ... lb.	6.60	10.40
Methyl methacrylate, tanks, divd ... lb.	.62	-
Methyl naphthyl ketone, cryst., dms ... lb.	14.00	-
Methylparaben, USP, 500 kilograms, f.o.b ... kilo	10.14	-
tech., 500 kilograms, f.o.b ... kilo	9.70	-
Methyl parathion, tech., 80%, dms., frt. alld. E ... lb.	1.65	-
Methyl phenylacetate, dms ... lb.	3.60	5.40
N-Methyl-2-pyrrolidone, tanks, f.o.b. plant ... lb.	1.28	-
dms., c.l., t.l., same basis ... lb.	1.34	-
Methyl rosaniline chloride, USP, 1-lb. cans ... lb.	5.50	-
Methyl salicylate, NF, 1000-lb. dms., t.l., frt. alld ... lb.	1.79	1.94
Methyl violet (see Methyl rosaniline chloride).		
Methyl violet toner, molybdated, PMA, bbls., divd. E. of Rockies. . lb.	3.25	-
Methyl violet toner, tungstated, PTA, bbls., same basis ... lb.	4.70	5.20
4,4,-Methylene dianiline (p,p-di-aminodiphenyl methane) crude, dms., t.l., f.o.b ... lb.	1.75	-
purif., flake, same basis ... lb.	2.25	-
Methylene di-p-phenylene di-isocyanate (see diphenylmethane 4,4,-di-isocyanate).		
Methylene chloride, tanks, 4,000 gal.-min., consumers, divd ... lb.	.35	-
Methylpentanediol (see Hexylene glycol).		
Methylphenylpyrazolone (see 1- Phenyl-3-methyl-pyrazolone-5).		
a-Methylstyrene, f.o.b. shipping pt .. lb.	.44	-
p-Methylnaphthalene, bulk, works. gal.	1.38	-
Methylthionine chloride (see Methylene blue).		
Mica, dry-grd., joint cement, plastic, 50 lb., bgs., c.l., works ... lb.	.07½	-
dry-grd., roofing, 20 to 80 mesh. works ... lb.	.07	-
paint or lacq., wet-grd., 325-mesh, bgs., c.l., f.o.b. works ... lb.	.16¾	-
rubber, bgs., c.l., f.o.b. works ... lb.	.16¾	-
wallpaper, bgs., c.l., f.o.b. works. lb.	.22	-
Microcrystalline wax, petroleum, coating grades, FDA, tanks, works ... lb.	.36½	.46½
laminating grades, FDA, tanks, works ... lb.	.38½	.46
Mineral oil, white, 50-65 vis., USP light tanks, refy ... gal.	2.38	-
65-75 vis., tanks, refy ... gal.	2.42	-
80-90 vis., tanks, refy ... gal.	2.45	-
145-155 vis., tanks, refy ... gal.	2.53	-
USP 180-190 vis., tanks, refy ... gal.	2.54	-
200-210 vis., tanks, refy ... gal.	2.56	-
340-350 vis., tanks, refy ... gal.	2.65	-
Mineral spirits, petroleum, odorless, tanks, New Jersey ... gal.	1.63	1.88
Houston, Tex ... gal.	1.78	1.79
Mineral spirits, petroleum, regular, tanks, New Jersey ... gal.	1.41	1.49
Houston, Tex ... gal.	1.41	1.43
Molybdate orange, bbls ... lb.	1.52	1.95
Molybdenum metal, com.l., powd., 99.8%, dms., works ... lb.	13.50	-
Molybdenum trioxide, CP, dms., works, 24,000 lbs. or more. lb.	5.25	-
tech., chemical, dms., 24,000 lbs. or more, basis ... lb.	2.65	2.85
tech. metallurgical, dms. same basis lb	2.65	2.85
Molybdic acid (See Ammonium Dimolybdate)		
Monoammonium phosphate, fert. grade, min. 13% N. 52% P. bulk, c.l., f.o.b. Fla. works ... ton	155.00	-
Monoammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald ... 100 lbs.	54.00	-
food grade, bgs., c.l., t.l., same basis ... 100 lbs.	59.25	-
Mono-tert-butyl-m-cresol, bulk, t.l. . lb.	1.69	-
Monobutylamine, bulk, divd ... lb.	.98	1.00
Monochloroacetic acid, purif. (see Chloroacetic acid, mono).		
Monochlorobenzene, tanks, f.o.b. . lb.	.42½	-
Monoethanolamine, tanks, frt. alld. E ... lb.	.43	.46
Monoethylamine, 70% aqueous tanks, frt. prepaid, 100% basis ... lb.	.94	-
anhyd., tanks, same basis ... lb.	.92	-
Monoisopropanolamine, dms., c.l., frt. alld. E ... lb.	.76	-
tanks, same basis ... lb.	.66	-
Monoisopropylamine, anhyd., dms., c.l., frt. prepaid ... lb.	.79	-
tanks, same basis ... lb.	.76	-
Monomethylamine, anhyd., tanks, contained basis frt. equald ... lb.	.54½	-
25% soln., tanks, frt. alld. 100% basis ... lb.	.57	-
40-60% soln., tanks, frt. equald. 100% basis ... lb.	.63½	-
Monopotassium glutamate, dms., 990 lb. or more, frt. alld ... lb.	2.60	-
Monosodium glutamate, 50-lb. bgs. c.l., t.l., divd ... lb.	.76	.80
100-lb. drums, c.l., t.l., divd ... lb.	.85	-
Monosodium phosphate (see Sodium phosphate, monobasic).		
Montan wax, crude, imp., German . lb.	.55	.57
dom., Calif., bgs., c.l., t.l., f.o.b. shipt. pt ... lb.	.61	-
refd., dom. Calif., same basis ... lb.		
Morphine alkaloid, NF, 25 K lots ... kilo	1018.00	-
Morphine sulfate, USP, 25 k lots .. kilo	850.00	-
Morpholine, dms., c.l., frt. alld. E ... lb.	1.02	-
tanks, frt. alld., E ... lb.	.94	-
Muriatic acid (see Hydrochloric acid).		
Musk. syn., ambrette, 25-lb. cns ... lb.	6.00	7.00
Musk. syn., ketone, dms ... lb.	10.75	-
Musk. syn., xylol, dms ... lb.	3.60	-
Mustard oil, syn. (see Allyl isothiocyanate).		
Mustard seed, Brown No. 1 ... lb.	.24	-
Canadian No. 1 Yellow ... lb.	.25	-
Oriental No. 1 bgs ... lb.	.25	-
Myrcia oil (see Bay oil).		
Myristic acid, coml., pure, t.l., bgs. . lb.	1.30	-
tanks ... lb.	1.12	-
Myristica oil (see Nutmeg oil).		
Myrrh gum, bgs ... lb.	2.25	-

N

Naphtha, high solvency (see Solvent naphtha, petroleum).		
Naphtha, petroleum, cleaners (see Cleaner's naphtha).		
Naphtha, VM&P, petroleum, tanks, New Jersey and New York ... gal.	1.29	1.34
Houston, Tex ... gal.	1.20	-
Naphthalene, crude, dom., 78°, tanks, works ... lb.	.22	-
Naphthalene, phthalic anhydride grade, tanks, works ... lb.	.23½	-
Naphthalene, petroleum, 80°C., f.o.b ... lb.	.30	.32½
Naphthalene, refd., balls, flakes, whole salers, jobbers, dms., works ... lb.	.65	.77
Naphthenic acid, crude, bulk, works lb.	.15	.32
refined, 220 acid, same basis ... lb.	.75	1.00
a-Naphthol, ground, dms., t.l. divd. . lb.	1.81	-
b-Naphthol, tech. flake, 50-lb. bgs., c.l., works ... lb.	1.10	-
Naphthol arylide red toner deep shades, bbls ... lb.	9.50	-
light shades, bbls ... lb.	7.75	-
2-Naphthol-3,6-disulfonic acid, disodium salt (see R salt).		
1-Naphthol-5-sulfonic acid (see L-acid).		
1-Naphthol-5-sulfonic 8-amino acid (see S acid).		
Naphthylamine sulfonic mixed acid (see Cleve's acid).		
a-Naphthylamine, tanks, f.o.b. works ... lb.	2.10	-
1-Naphthylamine-6-sulfonic acid (see Laurent's acid).		
2-Naphthylamine-4,8 disulfonic acid (see Cassella acid).		
2-Naphthylamine-1-sulfonic acid (see Tobias acid).		
Neatsfoot oil, 20°F, t.l., f.o.b. works dms ... lb.	.52	-
tanks, f.o.b. works ... lb.	.47	-
30°F, t.l., f.o.b. works ... lb.	.52	-
tanks, f.o.b. works ... lb.	.44	-
40°F, dms., t.l., f.o.b. works ... lb.	.48	.49
tanks, f.o.b. works ... lb.	.39	-
Delivered prices apply on shipments within 300-mile radius of Philadelphia, Pa.; other areas, 1¼c. higher; Texas, 2c. higher and West Coast 3c. higher.		
Neomycin sulfate, USP, non-sterile, dms., 50-kilo. lots, activity basis, divd ... kilo	75.00	-
Neopentyl glycol, slurry, 90%, c.l., t.l., divd ... lb.	.522	-
powder, flake, bgs. t.l., divd. . lb.	.598	
Nerol, tech., dms ... lb.	5.30	5.75
perf. grade, dms ... lb.	4.60	5.00
Neroli oil, NF French Bigarade, bots ... kilo	1580.00	1650.00
Tunisian, bots ... kilo	1150.00	-
Nerolidol syn. 55-gal. dms ... lb.	7.05	-
Nerolin, Bromelin ... kilo	7.22	-
Niacinamide, USP, t.l. dms ... kilo.	8.00	-
Niacin NF, dms., 5,000 kilos or more, divd ... kilo	7.50	-
feed-grade, 98-99.5%, bgs., same basis ... kilo.	5.10	5.50
Nickel acetate, dms., 5,000-lbs. to t.l., divd. E ... lb.	1.82	-
Nickel carbonate, dms., bgs., 5,000-lbs. to t.l., divd. E ... lb.	3.45	-
Nickel chloride, bgs., 10,000-lbs. to t.l., divd. E ... lb.	1.19	-
Nickel fluoborate, liq. conc., dms., t.l., divd ... lb.	1.61½	-
Nickel metal, electro cathodes, cs., works ... lb.	3.45	-
Nickel nitrate, dms., bgs., t.l., divd. E ... lb.	1.18	-
Nickel oxide, 75%-76% Ni, dms., 500-lb. lots, f.o.b. works ... lb.	2.80	-
Nickel sulfate, bgs., t.l., divd. E ... lb.	.80	.90
Nicotinic acid (see Niacin).		
Nicotinamide (see Niacinamide).		
Nitric acid, 36° Be., 38°Be, 40°Be, 42°Be. tanks, c.l., works NF, 100% basis ... ton	195.00	-
94½% to 98% HNO_3, tanks, works, 100% basis ... ton	280.00	-
o-Nitroaniline, flake, dms., t.l. works ... lb.	1.51	-
molten, refd., tanks, works ... lb.	1.44	-
molten, tech., works ... lb.	1.37	-
o-Nitroaniline, orange toner, bgs., frt. alld ... lb.	1.90	-
p-Nitroaniline, dms., c.l., t.l., 30,000 lb. min., works ... lb.	1.63	-
o-Nitroanisole, 100-kilo lots ... kilo	8.75	-
Nitrobenzene, tanks, f.o.b ... lb.	.33	.34
o-Nitrochlorobenzene, dms., t.l., c.l., f.o.b ... lb.	.82	-
tanks, same basis ... lb.	.74	-
2-Nitro-p-cresol, tech., dms., t.l., frt. alld ... lb.	1.75	-
Nitroethane, tanks, divd. E ... lb.	2.50	-
Nitrogen solutions, direct application, over 32% N, and mfgr. type, works ... unit-ton.	1.20	-
direct application, 19-32% N ... unit-ton.	1.26	1.46
Nitrogenous sewage sludge, processed, bulk, f.o.b. Chicago ... unit ton.	4.10	-
NOTE: Price is per unit NH_3 plus $1, per unit a.p.a. bulk, f.o.b. producer,s works, Chicago.		
Nitrogenous tankage, processed, bulk, per unit-ton NH_3, f.o.b. Carrollville, Wisc ... unit ton	7.00	-
f.o.b. Forbes, Ma ... unit ton	6.75	-
expanded, bulk, c.l., per unit-ton N, f.o.b. Forrestdale, R.I. unit ton	8.35	-
Nitromethane, dms., t.l., divd. E ... lb.	2.37	-
o-Nitrophenol, dms., f.o.b. works ... lb.	1.00	-
p-Nitrophenol, dms., c.l., f.o.b. works ... lb.	1.05	1.45
2-Nitropropane, tanks, frt. alld. E ... lb.	.55	-
m-Nitrotoluene, tech., dms., frt. alld. lb.	1.15	-
o-Nitrotoluene, dms., c.l., f.o.b ... lb.	.65	-
tanks, same basis ... lb.	.48	.57
p-Nitrotoluene, tech. dms., c.l., works ... lb.	.83	.85
tanks, works ... lb.	.70	-
Nonylphenol, tanks, f.o.b. E. of Rockies, min. frt. alld ... lb.	.49	.53½
Norephedrine hydrochloride (see Phenylpropanolamine hydrochloride)		
Nutmeg oil, dist., East Indian, NF, dms ... kilo	26.00	27.50
Nutmegs, East Indian, whole ... lb.	2.15	2.25

O

Ochre (see Iron oxide, yellow, nat.)		
Ocotea cymbarum oil dms ... lb.	2.25	2.30
1-Octadecanol, syn., tanks, f.o.b. ... lb.	.43½	-
1-Octanol, syn., tanks, f.o.b ... lb.	.70	-
n-Octane, 97% min., tanks, f.o.b. Houston, Tex ... gal.	6.25	-
Octyl alcohol, perfumer's grade, bots., cns ... lb.	1.40	1.75
n-Octyl, n-decyl phthalate, tanks, divd ... lb.	.33½	.37
tert-Octylamine, dms., c.l., t.l., works.	2.60	-
Octylphenol, molten. t.c., works ... lb.	.75	.76½
Oiticica oil, liq. dms ... lb.	.63	.67
tanks ... lb.	.56	.59
Oleic acid. dbl.-dist., (white), dms ... lb.	.46	.53
tanks ... lb.	.38	.44
Oleic acid, s.d. (red) dms ... lb.	.43	.49
tanks ... lb.	.35	.41
Oleum (see Sulfuric acid, fuming).		
Olibanum gum, tears, bgs ... lb.	2.10	-
Olive oil, edible, Spanish, dms ... gal.	8.00	-
Italian B-type ... gal.	5.10	-
Olivine, crude, works ... ton	12.00	-
20 mesh. works ... ton	15.00	-
100 mesh. works ... ton	20.00	-
Opium. USP, gran. powd. 25-kilo lots ... kilo	125.00	-
Orange oil, expressed, USP, Calif., dms., f.o.b. plant ... lb.	1.20	-
expressed Valencia, dms ... lb.	1.00	1.20
Calif., dist., cns. f.o.b. plant ... lb.	.40	-
Florida, dms ... lb.	.50	.55
Brazilian ... kilo	1.20	-
West Indian, bitter, NF X, cns., dms ... lb.	6.50	-
Orange peel, bitter, Haitian bls ... lb.	.38	-
Oregano, Greece, 30M ... lb.	1.01	1.03
Turkey ... lb.	.92	-
Mexico ... lb.	.60	.65
Origanum oil, Spanish, cns ... kilo	35.00	-
Orris root, Florentine, bls ... lb.	4.00	-
powd., bbls., bxs ... lb.	4.60	5.00
Verona bls ... lb.	3.00	-
powd., bbls., bxs ... lb.	4.60	5.00
Ouricury wax, refd., pure, bgs ... lb.	3.25	3.35
Oxalic acid, bgs., c.l., works ... lb.	.44	-
b-Oxynaphthoic acid dms. works, tech ... lb.	2.55	-
Oxyquinoline base, pure, 1,000 lbs., frt. alld ... lb.	8.00	-
Oxyquinoline sulfate, 100 lbs. frt. alld ... lb.	4.00	-

P

Palladium metal, works ... Troy-oz.	109.00	-
Palm oil, (see Oils, Fats & Waxes Market Report)		
Palm oil acid, dbl-dist. dms ... lb.	.31½	-
tanks ... lb.	.30	-
s.d., dms ... lb.	.42	.45
tanks ... lb.	.35	-
Palm kernel oil, bulk, c.l.f., U.S. ports ... lb.	.11	.14
Palmarosa oil, Indian dms ... kilo	36.00	-
Palmitic acid, 90%, tech., bags ... lb.	.53	-
tanks ... lb.	.51	-
Papaverine hydrochloride, NF powd., Imp. bulk ... kilo	56.00	-
Paprika, Hungarian, 100 AU bgs .. lb.	.84	-
Spanish, 110 AU bgs ... lb.	.87	-
Paraffin, fully-refd., 127-130 F., ASTM, tanks, refy ...	.29	.35
130-135 F., ASTM, tanks, refy.	.33½	.39
140-145 F., ASTM, tanks, refy.	.35	.41½
150-155 F., ASTM, tanks, refy.	.41½	.46
slack wax, 5% oil, tanks refy ...	.19	-
12% oil, tanks refy ...	.21	-
20% oil, tanks refy ...	.16	-
AMP temperatures are an arbitrary 3F higher than ASTP.		
Paraformaldehyde, 91%, flake, bgs. c.l., t.l., divd ... lb.	.29½	-
95%, powd., bgs., c.t., t.l. divd. lb.	.39½	-
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. E ... lb.	.76½	-
tanks, divd. E ... lb.	.58½	-
Parathion, ethyl, dms., frt. alld. ... lb.	1.75	-
Parathion methyl (see Methyl parathion).		
Para toner red, bbls ... lb.	3.75	-
chlorinated, (red 4) kgs ... lb.	3.75	-
Patchouli oil, Indonesian., dms ... kilo	20.00	22.00
Peach kernel oil, USP (see Apricot kernel oil).		
Peanut meal (see Oils, Fats & Waxes market report).		
Peanut oil (see Oils, Fats & Waxes market report).		
Pectin dom., NF, citrus, powd., 100-kilo lots divd ... lb.	3.30	3.70
Pelargonic acid, nat., tanks, min. frt. alld ... lb.	.70	-
syn., tanks, f.o.b. frt. alld ... lb.	.70	-
Penicillin, potassium, non-sterile, 200-billion-unit lots, ... billion units	20.00	25.00
Penicillin, procaine, sterile 50- billion-unit lots, bulk ... billion units.	36.00	-
Pennyroyal oil, dms ... lb.	5.90	-
Pentachlorophenol, 50-lb. bgs., t.l., f.o.b. Wichita, Kan ... lb.	.55	-
Pentaerythritol, tech., bgs., c.l., f.o.b., frt. alld ... lb.	.71	.72
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).		
Pentaerythritol triacrylate, t.l. dms., f.o.b. works ... lb.	1.50	-
Pentobarbital, dms., 100 lbs. or more, frt. alld ... lb.	7.00	-
Pentobarbital-sodium, dms., 100 lbs. or more, divd ... lb.	14.00	-
Pentylene tetrazol, NF, dms., 200-kilo lots ... kilo	32.00	-
Pepper, black, Brazilian, bgs ... lb.	1.98	-
Lampong, bgs ... lb.	2.03	-
Malabar, bgs ... lb.	2.05	-
Tellicherry, bgs ... lb.	2.40	-
Pepper, red Chinese Fukien rice bgs lb.	.85	-
Haimen, bgs ... lb.	1.00	-
Liling, bgs ... lb.	.78	-
Indian, S-4, bgs ... lb.	.68	-
Pakistan, dundicuts, bgs ... lb.	.43	-
Pepper, white, Muntok, bgs ... lb.	2.68	-
Peppermint leaves, imp., dms ... lb.	2.65	-
Peppermint oil, Madras ... lb.	13.00	14.50
Midwest ... lb.	13.00	14.00
Willamette ... lb.	11.00	13.50
Yakima ... lb.	8.50	10.00
syn., dms. f.o.b. works ... lb.	7.00	9.00

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

Perchloroethylene, dry cleaning grade, dist., tanks, dlvd. .... lb. .28½ -
Indust. grade, consumers, tanks, dlvd. .... lb. .31 -
Perl acid, dms. .... lb. 2.55 -
Permanent red 2B, (red 48), calcium salts, dms., frt. alld. .... lb. 5.25 -
barium salts, same basis .... lb. 5.25 -
Peru balsam, f.o.b. .... lb. 3.30 -
Petitgrain oil, Paraguay .... lb. 5.75 6.25
Petrolatum, USP, snow white, dms., c.l., refy. .... lb. .375 -
tanks, refy. .... lb. .310 -
USP, soft white, dms., c.l., refy. .... lb. .375 -
tanks, refy. .... lb. .310 -
USP, lily white, dms., c.l., refy. .... lb. .370 -
Petrolatum, USP, Lily white, tanks, refy. .... lb. .305 -
USP, cream, dms., c.l., refy. .... lb. .365 -
tanks, refy. .... lb. .30 -
USP, soft yellow, dms., c.l., refy. .... lb. .350 -
tanks, refy. .... lb. .285 -
USP, amber, dms., c.l., refy. .... lb. .345 -
tanks, refy. .... lb. .280 -
Petroleum pitch (see Asphalt, petroleum).
Petroleum sulfonate, 60-62%, sulfonic cont., HMW, bulk, works .... lb. .48½ .49
MMW, same basis .... lb. .49 -
LMW, same basis .... lb. .49 .49½
Prices for 51% sulfonic content 2c per lb. lower on corresponding molecular wts.
Phenacetin USP, powd., 200-lb. dms., 1,000-lb. lots, dlvd. .... lb. 2.20 -
100-lb. dms., 1,000-lb. lots, dlvd. lb. 2.22 2.45
p-Phenetidine, dms., c.l., f.o.b. .... lb. 2.00 -
Phenobarbital, USP, dms., 500-kilo lots, f.o.b. works .... kilo 19.50 -
Phenobarbital-sodium, NF, 500-kilo lots, f.o.b. works .... kilo 27.00 -
Phenol, syn. tanks, frt. equald. .... lb. .25 .29
p-Phenolsulfonic acid, 65% soln., dms., c.l., fob works .... lb. .54 -
tanks, same basis .... lb. .58 -
Phenothiazine, indust. grade, 50-lb. bags, c.l., f.o.b. works .... lb. 2.33 -
purif. grade, same basis .... lb. 2.69 -
Phenyl acetate, dms., 100-lb. lots, works .... lb. 1.04 -
Phenylacetic acid, pure cryst., 25-lb. cns. .... lb. 4.50 -
dl-Phenylalanine, dms., 25-kilo lots .... kilo 84.00 -
1-Phenyl-3-carbethoxy pyrazolone-5, dms. 200-lb. lots, dlvd. E. .... lb. 3.45 -
m-Phenylenediamine, cast, dms., c.l., t.l., f.o.b. works .... lb. 2.07 -
o-Phenylenediamine, flaked, dms., t.l., f.o.b. works .... lb. 3.25 -
p-Phenylenediamine, flaked, dms., f.o.b. works .... lb. 4.00 -
Phenylephrine hydrochloride, USP 100-kilo lots or more .... kilo 175.00 185.00
Phenylethyl acetate, dms. .... lb. 3.35 -
2-Phenylethyl alcohol, NF, dms. .... lb. 2.65 3.40
b-Phenylethylamine, dms., 30,000 lbs. or more, frt. alld. .... lb. 1.50 -
Phenylethylphenyl acetate, 25-lb. cns. .... lb. 5.50 6.90
Phenylglycolic acid (see Mandelic acid).
Phenylhydrazine, 99% min., dms. .... lb. 3.50 -
1-Phenyl-3-methyl-5-pyrazolone, dms., 250-lb. lots dlvd. E. .... lb. 1.80 -
o-Phenylphenol, dms., t.l., works .... lb. 1.35 2.00
p-Phenylphenol, bgs., t.l., 40,000 lbs. or more, works .... lb. 1.85 -
Phenylpropanolamine hydrochloride, 100-kilo dm. .... kilo 24.00 28.00
Phenylsalicylate, purif. cryst., dms., E. .... lb. 2.75 -
tech., cryst., E. .... lb. 2.25 -
flake, E. .... lb. 2.35 -
Phloxine toner (red 90), dms., frt. alld. .... lb. 1.95 2.05
Phosgene, 1-ton ret. cyls., 5 to 9-cyl. quantities, works .... lb. .55 .67
Phosphate rock, Fla., land pebble, run of mine washed, 66-68% b.p.l. bulk c.l. mines .... ton 23.15 -
vessel, Tampa, same basis .... ton 28.00 -
Phosphoric acid, com'l. and tech. grades, 75% tanks, works .... 100 lbs. 29.00 -
80% tanks, works .... 100 lbs. 31.00 -
85% N.F. tanks, f.o.b. freight equald. .... 100 lbs. 33.50 -
Food grade prices $2.00 above tech. grade.
Phosphoric acid, agricultural grade, 52-54% a.p.a., tanks, works .... unit-ton 3.10 -
super, min. 70% a.p.a., same basis .... unit-ton 3.45 -
Phosphorus, white (yellow) solid dms., c.l., works, frt. equald. .... lb. 1.00 -
tanks, works, f.o.b. works .... lb. .91 -
Phosphorus oxychloride, tanks, frt. equald. .... lb. .40 -
Phosphorus pentasulfide, powd., dms., c.l., works .... 100 lbs. 50.00 -
tote bins, sellers .... 100 lbs. 45.00 -
Phosphorus pentoxide, dms., t.l., works .... lb. .82 -
Phosphorus sesquisulfide, dms., cwt., c.l., works .... lb. .38 -
Phosphorus trichloride, dms., c.l., works .... lb. .45 -
tanks, works .... lb. .35 -
Phthalic anhydride, flake, c.l., t.l., dms., frt. equald. .... lb. .30 .335
molten, tanks, same basis .... lb. .27 .305
Prices 1-1½c. per lb. higher on the West Coast
Phthalimide, flake, works .... lb. .85 -
Phthalocyanine blue toner, red shade, bbls., frt. alld. E. of Rockies .... lb. 8.10 9.50
green shade, same basis .... lb. 6.40 8.50
resinated, bbls., same basis .... lb. 6.20 8.75

Phthalocyanine blue toner, water dispersable, bbls., same basis .... lb. 7.05 7.75
Phthalocyanine green toner, all grades, bbls., frt. alld. E. of Rockies .... lb. 8.10 10.10
Phthalocyanine green toner, resinated, bbls., same basis .... lb. 7.45 9.20
Phthalylsulfacetamide, dms., 500-kilo lots .... kilo 6.61 -
Picolines, refd, mixed, bulk .... kilo 2.81 -
Picric acid, pure paste, 25-lb. ctns., c.l., dry basis, f.o.b. Charlotte, N.C. .... lb. 6.00 -
tech., paste, 25-lb. ctns., t.l., dry basis, f.o.b. Charlotte, N.C. .... lb. 5.00 -
Pigment green B, kgs. .... lb. 2.20 -
Pilocarpine hydrochloride, USP, dms. .... kilo 1,500.00 2,000.00
Pimento see Allspice
Pimento leaf oil, dms. .... lb. 14.50 -
Pine oil, 80% min. alcohol content, bulk, f.o.b. works .... 100 lbs 47.00 53.00
dms., c.l., t.l., same basis .... 100 lbs 51.00 54.00
a-Pinene, perfume grade .... kilo 1.18 -
tech. grade .... lb. .16 .22
b-Pinene, perfumery grade, tanks .. kilo 1.90 -
resin grade, tanks .... lb. .88 -
Piperazine, anhyd., dms., t.l., frt. alld. E. .... lb. 1.80 -
Piperazine citrate, 36%, dms., 1,100-lb. lots, frt. alld. .... lb. 2.25 2.35
Piperazine dihydrochloride, 53%, dms., t.l., frt. alld. .... lb. 2.00 -
Piperazine hexahydrate, 44%, dms., 1,100-lb. lots, frt. alld. .... lb. 1.60 -
Piperazine phosphate, 42%, dms., t.l., frt. alld. .... lb. 1.60 -
Piperidine dist. 98% min., dms., c.l., t.l., works .... lb. 8.92 -
Piperonyl butoxide dms., dlvd. E. .. lb. 5.00 -
Platinum, metal, works .... Troy oz. 421.00 -
Polycarbonate resin, pellets, nat., t.l., frt. alld. .... lb. 1.84 1.86
Polyester resin, unsaturated, g.p., orthophthalic, bulk, tankcars, frt. alld. .... lb. .51 .53
Isophthalic, same basis .... lb. .56 .62
Polyethylene resin, high-density, blow molding, g.p., hopper cars, frt. alld. .... lb. .43 .46
injection molding, g.p., hopper cars, frt. alld. .... lb. .43 .46
extrusion, g.p., hopper cars, same basis .... lb. .47 .48
wire and cable, nat., hopper cars, same basis .... lb. .45 .49
wire and cable, black, same basis .... lb. .55½ .57
Polyethylene resin, low-density, film liner, hopper cars, frt. alld. .... lb. .35 -
clarity film, hopper cars, frt. alld. .... lb. .37 -
pallet shrink film, hopper cars, same basis .... lb. .35 -
extrusion coating, hopper cars, same basis .... lb. .38 .42
g.p., hopper cars, same basis .... lb. .38 .42
Polyethylene linear low-density g.p. resin .... lb. .36 .40
blown film resin .... lb. .40 .43½
cast film resin .... lb. .40 .45
Polyethylene resin, low-density injection molding, g.p., hopper cars, same basis .... lb. .45 .48
line wire, CATV, power cable .. lb. .647 -
wire and cable thermoplastic high-voltage, natural color, same basis .... lb. .70 .74½
wire and cable, XLPE low voltage, 14% carbon black, same basis .... lb. .67½ .72½
wire and cable jacketing, black .... lb. .587 .687
Polymyxin sulfate, USP, bulk, 50-billion units min. .... million units .52 -
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works .... lb. .73 -
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works .... lb. .73 -
Polypropylene resin, homopolymer, g.p., nat., t.l., frt. alld. .... lb. .45 .48
copolymer, med. impact, nat. .... lb.
high impact, same basis .... lb. .50 .56
Colored material etc. per lb. higher for each grade. .... lb. .53 .60
Polystyrene resin, cryst., nat., hopper cars, frt. alld. .... lb. .48 -
impact, nat., hopper cars, same basis .... lb. .51 -
high heat, high impact, nat., hopper cars, same basis .... lb. .52 -
expandable beads (EPS), pkging grade, 1,000-lb. lots .... lb. .69 -
modified, same basis .... lb. .73 -
Polyvinyl alcohol, fully hydrolyzed, medium viscosity, bgs., t.l., frt. alld. .... lb. 1.00 1.05
partially hydrolyzed, medium viscosity, bgs., t.l., dlvd. .... lb. 1.05 -
Polyvinyl chloride resin, g.p., homopolymer dispersion, bgs., t.l., dlvd. .... lb. .50 -
g.p. suspension, bulk, same basis .... lb. .38 -
pipe grade, bulk, same basis .... lb. .47 -
film grade, bulk, same basis .... lb. .37 .47
Polyvinyl chloride, g.p. copolymer dispersion, same basis .... lb. .58 .81
g.p. copolymer suspension, same basis .... lb. .45 .49
Popcorn seed, Dutch, bgs. .... lb. .38 .37
Turkey, bgs. .... lb. .30 -
Potash agricultural (see Potassium muriate).
Polash, caustic, liq., 45% basis, tanks, works .... 100 lbs. 13.00 -
West Coast, 50% basis, tanks, works .... 100 lbs. 18.08 -
reg. flake, 88-92%, 400-lb. dms., c.l., frt. equald. .... lb. 42.35 -
Potassium acetate, NF, gran., dms., t.l., works E. .... lb. .90 1.31
Potassium bicarbonate, tech., gran., bgs., c.l., works .... lb. .31½ -
Potassium bicarbonate, USP, gran., dms., t.l. .... lb. .72 -
Potassium bichromate, gran., 400-lb. dms., c.l., t.l., works .... lb. .48 -

Potassium bifluoride, tech., dms., t.l., works, frt. equald. .... lb. .45 .49
Potassium bitartrate, NF, gran., powd., bgs. .... lb. .90 1.20
Potassium borohydride, powd. dms., 100-1,000 lbs., works .... lb. 18.00 20.00
Potassium bromate, gran., powd., 200-lb. dms., c.l., f.o.b. works .... lb. 1.06 -
Potassium bromide, NF., gran., dms., c.l. f.o.b. works .... lb. 1.12 -
Potassium carbonate, liq., 47% K_2CO_3, dry basis, tanks, t.w., works .... 100 lbs. 15.40 -
dms., c.l., t.l., works .... 100 lbs. 20.65 -
calcined, 99-100% K_2CO_3, hopper cars or trucks, works .... 100 lbs. 32.50 -
bgs., c.l., t.l., works .... 100 lbs. 36.40 -
Potassium carbonate, hydrated, 83-88% K_2CO_3, dms., c.l., t.l., works .... 100 lbs. 34.90 -
bgs., c.l., t.l., works .... 100 lbs. 33.70 -
Potassium carbonate, gran., purif., 400-lb. dms., c.l., f.o.b. .... lb. .40 .46
Potassium chlorate, cryst., dms., c.l., works .... lb. .14½ -
powd., dms., c.l., works .... lb. .30 -
purif., gran., 325-lb. dms., f.o.b. shipping point .... lb. .40 -
Potassium chloride, chemical grade, 99.95% KCl, bulk, c.l., f.o.b works .... ton 105.00 -
USP cryst. dms. .... lb. 1.12 -
USP gran., dms. .... lb. .67 -
USP powd., dms. .... lb. .67 -
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate, purif., cryst., dms., works .... lb. .57 -
Potassium citrate, NF, gran., 200-lb. dms., frt. alld. .... lb. .93½ -
Potassium cyanide, dms., 20,000-lb. lots or more, f.o.b. works .. lb. 1.32 -
Potassium dichromate (see Potassium bichromate).
Potassium fluoborate, tech., dms., c.l., f.o.b. works .... lb. 1.40 1.42
Potassium fluoride, anhyd., dms., t.l. .... lb. 1.68 -
Potassium gluconate, dms., t.l., f.o.b. works .... lb. 1.45 -
Price W. of Denver 4c. per lb. higher.
Potassium guaiacolsulfonate, 300-lb. dms., 600 lbs. or more frt. equald. .... lb. 2.10 -
Potassium hydroxide, tech. (see Potash, caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works, frt. equald. .... lb. 1.29 1.31
Potassium iodide, USP, gran., cryst., dms., 1,000-lb. lots dlvd. .... lb. 10.72 12.39
ACS grade truckload .... lb. 11.32 13.55
Potassium-magnesium sulfate, sol., bgs., works .... ton 59.00 -
basis 40% K_2SO_4 and 55% $MgSO_4$, bulk, works .... ton 67.00 -
Potassium metabisulfite, gran., dms. t.l. .... lb. .44 -
Potassium muriate, 60-62.4% min. K_2O, std., bulk, c.l., frt. equald., f.o.b. Sask., Canada .... ton 44.00 45.00
soluble, fine std., f.o.b. Sask. .... ton 46.00 47.00
coarse, f.o.b. Sask. .... ton 49.00 50.00
gran., f.o.b. Sask. .... ton 50.80 51.50
Potassium nitrate, fert. grade, std., 50-ton c.l. dlvd. SE .... ton 267.00 274.00
prilled .... ton 277.00 284.00
tech., gran., bgs., c.l., min. 50 tons, dlvd. .... ton 470.00 -
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., frt. equald. .... lb. 2.64 -
Potassium pentaborate, gran., bgs., c.l., works .... ton 1.01 -
dms., same basis .... ton 1.08 -
Potassium pentaborate powder 15c. per lb. higher.
Potassium perchlorate, dms. c.l., works .... lb. .78 -
Potassium permanganate, free flowing, bulk, hopper trucks, works .... lb. 1.09 -
50-kg. dms., same basis .... lb. 1.20 -
150-kg. dms., same basis .... lb. 1.17 -
Potassium permanganate, USP, 50-lb. kgs., works, c.l., t.l. .... lb. 1.38 -
Potassium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant .... cwt. 78.80 -
c.l./t.l. same basis .... cwt. 72.50 -
Potassium pyrophosphate tetrabasic, bgs., c.l., t.l., works, E., frt. equald. .... 100 lbs. 43.75 47.25
bulk, same basis .... 100 lbs. 46.00 49.50
Potassium salicylate, USP, gran., 200-lb. dms., 2,000 lbs. or more, works, frt. alld. .... lb. 1.52 -
USP, powd., 300-lb. dms., 2,000 lbs. or more, same basis .... lb. 1.42 -
Potassium silicate, soln. 29.8-30.2 Be., 2.5 ratio, t.c., t.l., works .... 100 lbs. 12.40 14.25
drums, same basis .... 100 lbs. 18.40 -
40-40.5 Be., 2.1 ratio, t.c., t.l., works .... 100 lbs. 16.40 18.85
Potassium silicate, 40-40.5 Be., 2.1 ratio, dms., c.l., t.l., works .... 100 lbs. 20.40 -
electronics grade, 30-30.4 Be., 2.1-2.2 ratio, t.c., t.l., works .... 100 lbs. 17.10 19.65
Potassium silicate, dms., c.l., t.l., works .... lb. 21.10 -
solid or glass, 2.15 ratio, dms., c.l., t.l., works .... 100 lbs. 35.00 -
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of K_2O.
Potassium silicofluoride, bgs., c.l., t.l., frt. equald. .... lb. .11½ .16
Potassium-sodium tartrate, NF, gran. or powd., dms. .... lb. .80 1.20
Potassium sorbate, t.l. dms., dlvd. .. lb. 2.20 3.10
Potassium stannate, dms., frt. alld. .... lb. N.A. -
Potassium sulfate, agricultural grade, min. 50% K_2O, std., bulk, c.l., f.o.b. works .... ton 150.00 160.00
Potassium sulfate, gran., purif., 400-lb. dm. .... lb. .86 -

Potassium tetrathionate [illegible] .... lb. 1.10 -
Potassium thioglycolate [illegible] .... lb. 1.15 -
Potassium thiocyanate [illegible] .... lb. 4.01 -
Potassium titanate [illegible] .... lb. .62 -
Potassium titanium fluoride [illegible] .... lb. 7¼ -
Potassium [illegible] .... lb. 1.24 1.59
Prednisolone USP [illegible] .... gram .78 -
Prednisolone acetate [illegible] .... gram 1.03 -
Prednisone [illegible] .... gram 1.12 -
Procaine hydrochloride, USP [illegible] .... lb. 4.95 5.75
Procaine [illegible] .... lb. 4.95 5.50
Progesterone [illegible] .... gram 3½ -
Propionic acid [illegible] .... lb. 33 34½
n-Propyl acetate, tanks, dlvd. .... lb. .33½ -
n-Propyl alcohol, tanks, dlvd. .... lb. .42 .44
n-Propyl [illegible] .... lb. 11.50 -
n-Propyl-p-hydroxybenzoate, USP [illegible] .... kilo 10.80 -
tech. 500 kilos, f.o.b. .... kilo 10.35 -
Propyl parahydroxybenzoate (see n-Propyl p-hydroxybenzoate)
Propyl thiouracil, dms. 50 kilo lots or more .... kilo 55.00 -
n-Propylamine, dms. c.l. dlvd. .... lb. .75 .80
Propylene, polymer grade, f.o.b. Tex. and La. Gulf Coast points .... lb. 17½ -
chemical grade, same basis .... lb. 15½ .16
Propylene glycol, indust. tanks f.o.b. works .... lb. .40 .41
USP, tanks, f.o.b. E. .... lb. .43 .44
Propylene glycol monomethyl ether, tanks, dlvd. E. .... lb. .49 -
Propylene oxide, tanks, f.o.b. works, frt. equald. .... lb. .47½ -
Psyllium seed, USP powd. .... lb. 1.50 1.75
Pumice, [illegible] .... ton 270.00 -
medium [illegible] .... ton 309.00 -
coarse, [illegible] .... ton 309.00 -
Pumice, imp., Italian, [illegible] .... ton 280.00 -
medium, [illegible] East Coast .... ton 280.00 -
coarse, [illegible] East Coast .... ton 300.00 -
Pyrazolone red (red 38) dms., works .... lb. 5.25 5.35
Pyrethrum flowers, fine gnd. 0.9% pyrethrins .... lb. 1.91 -
Pyrethrum, pure, 20% pyrethrins, dms., works .... lb. 37.50 37.75
Pyridine, [illegible] .... lb. 5.40 -
tanks .... lb. 5.70 -
Pyridoxine hydrochloride, USP, 100 kilos or more, dlvd. .... kilo 29.00 33.00
Pyrilium, Cinnamon 40-50%, 5 ultras .... lb. 4.50 5.00
Pyrogallic acid (see Pyrogallol).
Pyrogallol, 100-lb. dms., 1,000-lb. lots, dlvd. .... lb. 13.70 15.25

Q

Quassia chips .... lb. .57 -
Quinacrine [illegible] .... lb. 20.75 24.25
[illegible] .... lb. 17.75 19.00
[illegible] .... lb. 21.75 24.25
[illegible] .... lb. 17.75 19.00
Quinine [illegible] .... lb. 2.00 2.75
Quinine sulfate, USP, 1,000-oz. lots, 2,000 oz. or more .... oz. 4.20 4.25
Quinine hydrochloride, NF, 1,000 oz. lots, 2,000 oz. or more .... oz. 2.45 2.50
Quinine sulfate, USP XVIII, 1,000-oz. lots, 2,000 oz. or more .... oz. 2.30 2.50
Quinoline, [illegible] .... lb. 1.49 -
tanks, same basis .... lb. 1.43 -

R

R salt tech., 304 molecular wt. .... lb. 2.12 -
Racemethionine, USP, 50-250 kilos .... kilo 6.80 -
250-500 kilos .... kilo 6.60 -
500 or more kilos .... kilo 6.50 -
feed grade, 99% min., c.l., t.l. .... lb. 1.07 -
Rapeseed oil, dms. .... lb. .58½ .62½
Rauwolfia serpentina root, powd. bls., lb. .... 22.00 -
Red cadmine. No. 40 (see Carmine No. 40)
Red precipitate (see Mercuric oxide, red).
Reserpine, USP, cryst., bots. .... gram .40 .42½
Resorcinol tech., bgs, t.l., works, dlvd. .... lb. 3.98 -
Resorcinol, USP, cryst., dms., 50 kilos or more, works .... lb. 9.35 -
powd. dms., same basis .... kilo 9.90 -
Resorcinol monoacetate, dms., 1,000 lbs. or more .... lb. 1.98 -
Rhodamine red toner, molybdated, PMA, dms., works .... lb. 9.26 -
tungstated, PTMA, dms., f.o.b. works .... lb. 11.50 14.20
Rhodinol, 25-lb. cns. .... lb. 105.00 108.10
syn., dms. .... lb. 13.00 -
Rhubarb root, India, whole, bgs. .... lb. .45 -
powd., bgs. .... lb. .61 -
Riboflavin, feed grade, 25 kilos, dlvd. .... kilo 34.50 -
Riboflavin, USP, 25 kilos, dlvd. .... kilo 43.00 46.00
Riboflavin 5-phosphate-sodium, 25-kilo lots .... kilo 138.00 -

Rice bran oil, bleached, dms. t.l. .... lb. .90 .91
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch, roofing.)
Rose oil, nat., NF, Bulgarian, otto, bots. .... kilo 3850.00 3990.00
Turkish, otto, bots. .... kilo 2250.00 3000.00
Rosemary oil, NF, Spanish, dms. .. kilo 9.00 14.50
Tunisian, dms. .... kilo 8.75 15.00
Rotenone resin, 30-45%, 100-lb. dms. works .... unit-lb. .21 .23

S

Saccharin NF, gran., soluble, dms. 1,000-lb. lots, frt. alld. .... lb. 2.60 2.75
Saccharin NF, powd. soluble, dms., less than 20,000-lb. lots, frt. alld. .. lb. 3.75 -
Safflower oil, non-break, tanks, N.Y. .. lb. .47 .50
edible dms., N.Y., dlvd. .... lb. .93 .97
Sage leaves, Dalmatian, No. 1, bgs. lb. 1.75 -
Albanian, bgs. .... lb. 1.30 -
Israeli .... lb. .80 -
Sage oil, Clary, French, bots. .... kilo 90.00 -
Dalmatian, cns. .... lb. 9.50 10.00
Spanish, cns. .... kilo 12.50 -
Salicylaldehyde, tanks, f.o.b. .... lb. 3.60 -
Salicylamide, NF, gran., powd., dms., 2,000-lb. lots, one ship. .... lb. 1.07 1.10
Salicylic acid, tech., dms., c.l., t.l., works .... lb. 1.23 1.41
USP, cryst., dms., 1,000 lbs. or more .... lb. 1.33 1.63
USP, powd., dms., 1,000 lbs. or more .... lb. 1.68 -
Salol (see Phenylsalicylate).
Salt, evaporated, common, 80-lb. bgs., c.l., t.l., North, works .. 80 lbs. 4.02 -
bulk, same basis .... ton 60.00 61.20
chemical grade, same basis .. 80 lbs. 4.30 -
Salt, rock, medium, coarse, same basis .... 80 lbs. 2.70 -
bulk, same basis .... ton 18.00 25.00
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis, f.o.b. works E. ton 65.00 98.00
same basis W. .... ton 90.00 99.00
Sandalwood oil, E. Indian .... kilo 145.00 -
Indonesia .... kilo 102.00 -
Sarcosine, tech., tanks, works, frt. equald. .... lb. .74½ -
Schaeffer's salt, paste, dms. 100% basis, works .... lb. 2.59 -
Scopolamine hydrobromide, USP, 100-oz. lots bots. .... oz. 36.00 48.50
Sebacic acid, CP, bgs., c.l., works .. lb. 2.14 -
purif., bgs., c.l., works .... lb. 2.13 -
Seidlitz mixture, dms., 5,000-lb. lots lb. .30½ -
Selenium, powd., 99.99% Se, dms., dlvd. .... lb. 13.00 -
coml. 99.5% Se, same basis .... lb. 10.00 15.00
Senna leaves, Alexandria, whole and half, bls. .... lb. .75 .80
Tinnevelly, No. 1, bls. .... lb. .70 .71
powd., bbls. .... lb. .91 1.00
Sesame oil, USP, dms., t.l. .... lb. 1.00 1.20
Sesame seed, Central American, hulled, bgs. .... lb. .50 .51
Sienna pigment, burnt, paper bgs., t.c.l., works .... lb. .19½ .28½
raw, paper bgs., t.c.l., works .... lb. .18½ .23¼
Silica, amorph., dry-grd., bgs., c.l., works 93%, 200 mesh .... ton 31.00 32.50
98%, 200 mesh .... ton 32.00 33.50
93%, 97%, 325 mesh .... ton 34.60 35.50
98.5%, 325 mesh .... ton 37.00 -
99.5%, 325 mesh .... ton 51.50 54.50
Silica, dry-grd., bgs., c.l., works, 99.9%, 400 mesh, micronized .... ton 72.00 75.50
99% under 15 microns, micronized .... ton 79.50 82.50
99% under 10 microns, micronized .... ton 104.00 105.00
Silica, hard-quartz, 99.5% SiO_2, 325 mesh, bgs., c.l., works .... ton 37.00 -
140 mesh, bgs., c.l., works .... ton 34.75 -
Silicon tetrachloride, tech., dms., c.l., works .... lb. .50 -
tanks, works .... lb. .22 -
Silver bullion, ingots, ca. Troy .... oz. 5.17 -
Silver cyanide, 80% Ag 500-oz. lots oz. 4.1475 -
Silver nitrate, ACS, 63.2 troy oz. AG/100 avdr. oz. $AgNO_3$ .... oz. 3.0986 -
Soapbark, crushed, bls. .... lb. 1.00 -
powd., bls. .... lb. 1.35 1.65
Soda ash, dense, 58%, 100-lb. paper bgs. c.l., works, f.o.b. .... ton 120.00 -
bulk, c.l., same basis .... ton 90.00 -
light 58%, 100- lb., paper bgs. c.l., same basis .... ton 150.00 -
bulk, c.l., same basis .... ton 120.00 -
Soda, caustic, liq., 50%, sellers tanks, Gulf Coast works, f.o.b., frt. equal., 76% Na_2O .... ton 175.00 195.00
73%, same basis .... ton 205.00 225.00
flake, 76% 400-lb. dms. c.l. works .. ton 500.00 570.00
solid, 76% 700-lb. dms. c.l. works .... ton 520.00 570.00
gran., 76% 450-lb. dms. c.l. works .... ton 520.00 -
beads, 76%, 400-lb. dms., c.l., works .... lb. 27.50 28.50
Prices for liq. rayon-type, $15 ton higher. Prices in West 70c. higher for solid, and $20-$30 ton higher for gran. and beads.
Soda, sal., conc., bgs., c.l. works .... 100 lbs. 3.35 3.86
Sodium acetate, anhyd., bgs., c.l., t.l., works .... lb. .54 -
Sodium acetate, USP, 60%, gran. 100-lb. dms., c.l., works .... lb. .57 -
Sodium alginate, NF, white powd., dom., 300 lbs. or more .... lb. 6.00 6.75
Sodium p-aminosalicylate, dms., 100-lb. lots or more, works .. lb. 4.73 -
Sodium aminosalicylate, bgs., c.l. dlvd. E. lb. 1.49 1.50
Sodium ascorbate, USP, dms., 100 kilos .... kilo 9.30 10.50
Sodium benzoate, tech., bgs., c.l., t.l. works .... lb. .70½ -
Sodium benzoate, USP, 50-lb. bgs., c.l., t.l., frt. alld. .... lb. .63½ -
ton-lots, same basis .... lb. .68½ -
100-lb. dms., c.l., t.l., same basis .. lb. .69 -
ton-lots, same basis .... lb. .92 -

Sodium bicarbonate, USP, powd., reg. grade, bgs., c.l., works, frt. equald. .... 100 lbs. 17.05 -
coarse, same basis .... 100 lbs. 18.05 -
fine, same basis .... 100 lbs. 17.20 -
gran., fine, same basis .... 100 lbs. 17.65 -
gran., fine, same basis .... 100 lbs. 17.80 -
Sodium bichromate, gran., bgs. c.l., t.l., works, frt. equald. .... lb. .67 -
Sodium bifluoride, 400-lb. dms., c.l., frt. equald. .... lb. .78 -
100-lb. bgs., c.l., same basis .... lb. .78 -
Sodium bisulfate, bulk, c.l., works, ton 175.00 -
dms., c.l. .... 100 lbs. 13.00 -
Sodium bisulfate, anhyd. bgs., c.l., works, East .... 100 lbs. 28.50 -
works, West .... 100 lbs. 32.00 -
Sodium bisulfite, soln., 38%, bulk, 100% basis, works, East .... 100 lbs. 20.60 -
soln., 100%, bulk, works, West 100 lbs. 20.00 -
photographic grade, 43% soln. works .... 100 lbs. 21.90 -
Sodium borate NF, gran., bgs., c.l., works .... lb. .51 -
powd., same basis .... lb. .52 -
Sodium borohydride, powd., dms., 100-5000 lbs. works .... lb. 19.86 21.90
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis, 3000 gal. tankwagon, works, lb. 17.45 -
Sodium bromide, 99%, gran., 400-lb. dms., f.o.b. works .... lb. 1.04 -
Sodium carbonate, decahydrate, bgs., c.l., t.l., works .... ton 264.00 -
Sodium carbonate, cryst. monohydrate (see Soda, ash)
Sodium carbonate, monohydrated, bgs., c.l., t.l., works .... ton 392.00 -
Sodium carboxymethyl cellulose (see CMC.)
Sodium chlorate, bulk, t.c., t.l., f.o.b. works .... ton 420.00 440.00
Sodium chlorate, cryst., 450-lb. dms., c.l., works, E. .... lb. .27 -
Sodium chloride (see Salt).
Sodium chlorite, USP, gran., bgs. .. lb. .29 -
Sodium chlorite, tech., dms., c.l., works .... lb. 1.17 1.27
Sodium chromate, anhyd., dms., c.l., t.l., works .... lb. .87 -
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works .... lb. .64 -
Sodium citrate, gran., anhyd., 200-lb. dms., t.l., N.Y. .... lb. 1.05 -
Sodium citrate, USP, gran., dihydrate, 100-lb. bgs., t.l., f.o.b. shipping point .... lb. .74½ -
Sodium cyanate, dms. 1,000-lb. lots. works .... lb. .85 -
Sodium cyanide, briquettes or gran., 99% min., 200-lb. dms. min. 1,000 lb. works .... lb. .68 -
Sodium decylate, tech. dms., c.l. .... lb. .68 -
Sodium diacetate, FCC, 50-lb. bgs., t.l., dlvd. E. of Rockies .... lb. .81 .87
Sodium diacetate, tech., 50-lb. dms., c.l., works .... lb. .52 -
Sodium erythorbate, powd., gran., t.l. or mixed t.l., f.o.b. shipping point .... lb. 2.60 2.85
Prices W. of Denver 2c. per pound higher.
Sodium ferrocyanide, bulk, t.l., 40,000 lb. min., works .... lb. .62 -
Sodium fluoborate, tech., gran., bgs., c.l., works .... lb. 1.77 -
Sodium fluoride, white, 97%, 400-lb. dms., c.l., works, frt. equald. .. lb. .5345 -
100 bgs., c.l., same basis .... lb. .60 -
USP powd., 200-lb. dms., t.l., f.o.b. shipping point .... lb. 4.69 -
Sodium formate, bgs., c.l., works .. lb. .20 -
Sodium gluconate, tech., 50-lb. bgs., 2,500 lbs. or more frt. alld. lb. .60 -
Sodium hydride, oil dispersion, 60% NaH, 187-lb. dms., 10 dms., works .... lb. 1.85 -
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms., c.l., t.l., f.o.b. shipping point E. .... lb. .84 -
Sodium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works, frt. equald. .... lb. .95 .98
Sodium hydroxide, tech. (see Soda, caustic)
Sodium hypophosphite, EN grade, 300 lb. dms f.o.b. works .... lb. 1.26 -
110 lb. dms. .... lb. 1.47 1.52
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, cryst., 300- to 600-lb. dms., frt. alld. .... lb. 14.72 -
Sodium isuryl sulfate, 30%, tanks, f.o.b. works .... lb. .29 .32
Sodium lignin sulfonate, bgs., c.l., works .... 100 lbs. 25.50 -
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate, octahydrate, gran., bgs., c.l., t.l., works .. lb. .36 -
tetrahydrate, gran, bgs, c.l., works .... lb. .49 -
Sodium, metallic, 12-lb. bricks, dms., c.l. works .... lb. .93 -
fused, dms. 24,000-lb. lots or more, works .... lb. .87 -
tanks, works .... lb. .70 .80
Sodium metaphosphate, tech. bgs., c.l., f.o.b. shipping point, t.l., works .... lb. 61.60 -
food grade, bgs. c.l. f.o.b. frt. equald. .... lb. 88.25 -
Sodium metasilicate, anhyd., bgs., c.l., works .... 100 lbs. 27.25 -
bulk, c.l., works .... 100 lbs. 25.80 -
pentahydrate, bgs., c.l., f.o.b. shipping point .... 100 lbs. 18.95 -
bulk, c.l. works .... 100 lbs. 17.20 -
Sodium molybdate, anhyd., dms. f.o.b. works, 100 lbs and over .... lb. 4.87 -
cryst., dms., t.l., same basis .... lb. 4.12 -
Sodium naphthionate, dms., c.l., t.l., f.o.b. works .... lb. 2.00 -
Sodium nitrate, USP, dms., c.l., works .... lb. 34.50 -
Sodium nitrate, dom., industrial, bgs., c.l., works .... ton 284.00 292.00
bulk, c.l., works .... ton 250.00 -
imp., coml., 100-lb. bgs., c.l., All., or Gulf whse. .... ton 206.00 214.00
bulk, c.l., same basis .... ton 162.00 -
imp., agricultural, bulk, c.l., same basis .... ton 140.00 -
Sodium nitrite, USP, dms., c.l., works, frt. equald. .... lb. 37.25 -

Sodium orthosilicate, tech., anhyd., bgs., c.l., works .... 100 lbs. 34.60 -
Sodium orthosilicate, tech., hydrated, flake, dms., c.l., works. 100 lbs. 27.45 -
bgs., c.l., works .... 100 lbs. 26.25 -
Sodium oxalate, 99%, bgs., t.l., works. lb. .45 -
Sodium pentachlorophenate, beads c.l., 30,000-lb min. .... lb. .67 -
bgs. .... lb. .66 -
Sodium pentobarbital (see Pentobarbital-sodium).
Sodium perborate, tetrahydrate, tech., bgs., c.l., t.l., works .... lb. .32½ .36½
Sodium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant .... lb. .63½ -
56-lb. bgs. same basis .... lb. .62 -
Sodium phenobarbital (see Phenobarbital-Sodium).
Sodium phenolsulfonate, powd., dms., lb. .76 -
Sodium phosphate, anhyd., dibasic tech., bgs., c.l., t.l. works, frt. equald. .... 100 lbs. 54.50 -
food grade, same basis. 100 lbs. 57.50 -
Sodium phosphate, monobasic, tech., same basis .... 100 lbs. 56.75 -
food grade, same basis. 100 lbs. 59.75 -
tribasic, tech., same basis. 100 lbs. 52.25 52.75
food grade, same basis. 100 lbs. 63.25 -
chlorinated, same basis. 100 lbs. 31.50 -
cryst. tech., same basis. 100 lbs. 30.50 -
cryst., food grade, same basis .... 100 lbs. 35.60 -
USP, dried, powd., bgs., dms., works .... lb. .19 .20½
Sodium picramate, tech., paste, 200-lb. dms., dry basis, dlvd. .. lb. 5.50 -
Sodium propionate, dms., 2,000 lbs. or more, f.o.b. frt. alld. .... lb. .54 -
Sodium pyrophosphate, acid, tech, bgs., c.l., works, frt. equald. 100 lbs. 58.25 -
food grade, non-leavening, bgs., c.l., works, frt. equald. .... 100 lbs. 61.25 -
Sodium pyrophosphate, ferric, dms., c.l., t.l., works .... lb. .3880 -
Sodium pyrophosphate, tetrabasic, anhyd., tech., bgs., c.l., t.l., works, frt. equald. .... 100 lbs. 44.75 -
bulk, hopper cars, same basis .... 100 lbs. 42.50 -
food grade, bgs., c.l., t.l., same basis .... 100 lbs. 53.00 -
Sodium salicylate, USP, cryst., 200-lb. dms., 1,000-lb lots or more, works, frt. alld. .... lb. 3.00 -
USP, powd., 200-lb. dms., 1,000-lb. lots or more, same basis .... lb. 3.05 -
Sodium sesquicarbonate, bulk, c.l., t.l., works .... ton. 170.00 -
bgs, c.l., t.l. works .... 100 lbs. 198.00 -
Sodium silicate, soln. or glass, 3.22-3.25 ratio, bulk, c.l., t.l., works .... 100 lbs. 15.70 -
bgs., c.l., t.l., works .... 100 lbs. 27.75 -
1.98-2.00 ratio, bulk, c.l., t.l., works .... 100 lbs. 20.30 -
bgs, c.l., t.l., works .... 100 lbs. 22.15 -
soln., 37.6° sol., 3.22-3.25 ratio, bulk, c.l., t.l., works .... 100 lbs. 6.30 -
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of Na_2O.
Sodium silicofluoride, bgs., c.l., t.l., works, frt. equald. .... 100 lbs. 17.95 19.75
Sodium stannate, dms. wks. frt. alld. E.lb. N.A. -
Sodium sulfanilate, dms, works .... lb. .22 -
Sodium sulfate, NF XII, powd., dms., 2,000-lb. lots .... lb. .23½ -
tech., detergent, rayon-grade, c.l., works .... ton 90.00 96.00
Sodium sulfate, West, bulk, c.l., works, frt. equald. .... ton 90.00 101.00
bulk, c.l., East, same basis .... ton 113.00 114.00
Sodium sulfate, photo grade, 100-lb. bgs., c.l., works .... ton 47.00 53.00
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald. .... ton 500.00 -
liq., 44-45%, tanks, works, frt. equald. .... ton 500.00 -
Sodium sulfide, flake, dms., c.l., works, frt. equald. .... ton 470.00 -
bgs., same basis .... ton 410.00 -
Sodium sulfide, fused, dms., c.l., works, E., frt. equald. .... ton 240.00 -
Sodium sulfite, anhyd., tech. 95-100% bgs., f.o.b. works .... 100 lbs. 23.76 -
Sodium sulfocyanide CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq. 34%, dms., c.l., works, frt. equald. .... ton 540.00 -
Sodium thiocyanate, purif., cryst., 250-lb. dms., 5 dms. or more, f.o.b. works .... lb. 3.26 -
tech., anhyd. dms., 2,000 lbs. or more, works .... lb. .97 -
Sodium thiosulfate, tech., photo- grade, bgs., c.l., works, frt. equald. .... 100 lbs. 45.60 -
cryst. pentahydrate, c.l., t.l., same basis .... 100 lbs. 28.50 -
Sodium titanate, dms., c.l., works. lb. .14¼ -
Sodium tripolyphosphate, 95%, 50-lb. bgs., c.l., frt. alld. E. .... lb. .28 -
Sodium tripolyphosphate, tech., bgs. c.l., works, frt. equald. 100 lbs. 39.75 -
bulk, hopper cars, same basis. 100 lbs. 37.60 -
food grade, bgs., c.l., t.l., same basis .... 100 lbs. 48.50 -
Sodium tungstate, tech. high moly., dms., 10,000 lbs. or more, frt. alld. .... lb. 5.00 5.50
Folin grade dms., 10,000 lbs. or more, same basis .... lb. 8.00 -
Sodium-ammonium phosphate, purif., cryst., dms., works .... lb. .52 -
Sodium-formaldehyde sulfoxylate, dms., t.l., f.o.b. works .... lb. .91 -
Sodium-zirconyl sulfate, dms., 1,000-lb. lots or more, works .... lb. .28 -
tech. dms., any quantity, works .. lb. .16 -
Solvent naphtha, petroleum, straight aromatic, b.r. 320°-360°F, 56°F m.a.p., tanks:
New Jersey .... gal. 1.62 -
Houston .... gal. 1.41 -
Illinois .... gal. 1.54 -
Solvent naphtha, petroleum, straight aromatic, b.r. 360°F-410°F, 80°F m.a.p. tanks:
New Jersey .... gal. 1.30 1.38
Houston .... gal. 1.30 -
Illinois .... gal. 1.30 -
Sorbic acid, t.l. dms., dlvd. .... lb. 2.20 3.10

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

Sorbitan monostearate, dms., c.l., t.l., 30,000 lb. min., f.o.b. works .... lb. .76 -
Sorbitan tristearate, c.l., t.l., 30,000 lb. min., f.o.b. works .... lb. .80 -
Sorbitol, USP, reg. 70% aqueous, dms., c.l., f.o.b. shipping point .... lb. .35 -
tanks, f.o.b. shipping point .. lb. .30 -
gran. dms., c.l. t.l. works .... lb. .70 .74
powd., dms., c.l., t.l., works .... lb. .68 .72
Soybean meal (See Oils, Fats & Waxes market report.)
Soybean oil (See Oils, Fats & Waxes market report.)
Soybean oil acidulated, soapstock, 95% acid, tanks, New York .. lb. .14 .15
Soybean oil, acid. dist., dms .... lb. .48 .59
tanks .... lb. .43 .44
s.d., dms. .... lb. .47 .58
tanks .... lb. .38 .43
Spearmint leaves, imp., bls. .... lb. 2.60 2.70
Spearmint oil, Far West, native .... lb. 10.75 11.50
Midwest, native .... lb. 12.00 -
Far West, Scotch .... lb. 14.50 15.25
Midwest, Scotch .... lb. 14.50 15.25
Spruce oil, dms. .... lb. 6.00 -
St. John's bread, edible, bls. .... lb. .29 .30
Stannic chloride, anhyd., dms., works .... lb. 2.128 -
Stannic oxide, dms., works .... lb. 12.00 -
Stannic chloride, anhyd., dms., works .... lb. N.A. -
Stannic oxide, dms., works .... lb. N.A. -
Stannous chloride, anhyd. dms. wks .. lb. 3.509 -
Stannous fluoborate, liq., conc., dms., t.l., works, frt. equald. .... lb. 3.49 3.51
Stannous oxide, dms., works .... lb. N.A. - 5
Stannous sulfate, dms., works .... lb. N.A. -
Stearic acid, double pressed, bulk .. lb. .26 .39
single-pressed, bulk .... lb. .26 .375
triple-pressed, bulk .... lb. .32 .40
t.l., works .... lb. .37¼ -
Strontium nitrate, 50-15 bgs., c.l., works .... 100 lbs. 51.50 -
Styrene monomer, 99.6% min., t.c., t.l., f.o.b. works .... lb. .21 -
Styrene-acrylonitrile resin, nat., bulk, f.o.b. plant .... lb. .77 -
cryst., bulk, same basis .... lb. .77 .81
clear, same basis .... lb. .77 .81
Styrol acetate, dms. .... lb. 2.35 -
Succinic acid, purif., cryst., dms., t.l., frt. alld. .... lb. 2.00 2.10
Succinic anhydride, dms., c.l., t.l., f.o.b. works .... lb. 1.71 -
Sucrose, refd., white, bgs., c.l., f.o.b. refy., E. .... lb. 33.10 -
Sucrose acetate, isobutyrate, 90% dms., t.l., dlvd. .... lb. 1.18 -
tanks, dlvd. .... lb. 1.10 -
100%, dms., t.l., dlvd. .... lb. 1.18 -
Sucrose octa-acetate, denaturing grade, 100-lb. dms., f.o.b. works .... lb. 12.50 13.50
Sulfabenzamide, dms., 500 kilos. kilo 39.50 -
Sulfabenzamide-sodium, dms., 500 kilos .... kilo 25.00 -
Sulfacetamide, USP, dms., 500 kilos .... kilo 20.00 23.50
Sulfadiazine, USP, powd. dms., 500 kilos .... kilo 53.00 -
Sulfadiazine-sodium, USP, dms., 500 kilos .... kilo 40.70 -
Sulfamerazine, USP, microcrystals, dms., 500 kilos .... kilo 33.50 -
USP, powd., dms., 500 kilos .... kilo 32.00 -
Sulfamethazine-sodium, USP, powd. dms., 500 kilos .... kilo 13.00 -
Sulfamethazine, powder, dms., 500 kilos .... kilo 9.80 10.00
Sulfamic acid, cryst., bgs., c.l., t.l., works .... lb. 38.00 41.00
Sulfamic acid, gran., bgs., c.l., t.l., works .... lb. .36 -
Sulfanilamide, NF, reg. 1,000-lb. dms., frt. alld. .... lb. 2.00 -
Sulfanilic acid, tech., bgs., t.l., f.o.b. works .... lb. .67¼ -
Sulfaquinoxaline, veterinary, grade, dms. .... lb. 8.00 -
Sulfur, crude, bright, molten, dom., f.o.b. vessels, Gulfports .... long-ton 150.00 -
f.o.b. La. refy. .... long-ton 125.50 -
recovered, dlvd., Houston .. long-ton 125.50 -
ex terminal, Rotterdam .... long ton 135.00 -
f.o.b. tanks, Alberta, Canada, for US delivery .... long-ton 102.00 -
dark, ex-Tampa, Fla. .... long-ton 157.50 -
Sulfur, crude, 99.6% min. purity, coml. flour, 50-lb. bgs., c.l., mines basis .... 100 lbs. 13.60 -
lump, same basis .... 100 lbs. 13.60 -
Sulfur, refd., 99.5% min. purity, rolls 50-lb. bags, c.l., mines basis .... 100 lbs. 17.50 -
flour, light, 50-lb. bgs., same basis .... 100 lbs. 20.00 -
Sulfur, refd., sublimed, NF, 99.85% min. purity, 50-lb. bgs., c.l., mines basis .... 100 lbs. 26.00 -
Sulfur, rubbermakers, 99.5% min. purity, coml., reg., 50-lb. bgs., c.l., mines basis .... 100 lbs. 14.80 -
fine, 98% min. passing through 325 mesh, same basis .... 100 lbs. 18.10 -
Sulfur dichloride, dms., c.l., works, frt. equald. .... lb. .24 -
tanks, same basis .... lb. .17¾ -
Sulfur monochloride, dms., c.l., works, frt. equald. .... lb. 276.00 -
Sulfur dioxide, liq., coml. multiunit cars, dms., f.o.b. works .... ton 210.00 220.00
tanks, works .... ton 225.00 -
Sulfur trioxide, [illegible] frt. equald. .... lb. .15¼ -
tanks, same basis .... lb. .15¾ -

CHEMICAL PRICES

WEEK ENDING JUNE 6, 1986

Sulfuric acid, virgin 100% tanks, works,			
East Coast	ton	71.75	95.90
Gulf Coast	ton	75.00	86.40
Midwest	ton	80.25	–
Southeast	ton	88.15	–
West Coast	ton	85.00	–

NOTE: For prices on 60 and 66 Be., multiply by .7767 and .9319, respectively. For price of 20% fuming oleum, as is, add \$3-\$4 to above prices and multiply by 1.045.

Sulfuric acid, smelter, 100% tanks, works,			
Gulf Coast	ton	48.00	52.00
New Mexico	ton	20.00	25.00
Southeast	ton	63.15	–
93%, tanks, divd., Northwest	ton	60.00	65.00
Sunflowerseed oil, crude, f.o.b. Minneapolis	lb.	.18	.20
Superphosphate, triple, 46% or more, a.p.a., run-of-pile, bulk, c.l., Fla.	unit-ton	2.75	3.05
bulk, gran., c.l., Fla.	ton	160.00	165.00

T

2,4,5-T acid tech., 50-lb. bgs., c.l., t.l., works	lb.	2.50	–
2,4,5-T, iso-octyl ester, tech., 55-gal. dms., c.l., t.l., works, frt. equald.	lb.	.93	–
2,000 lbs. to t.l., same basis	lb.	.99	–
tanks, same basis	lb.	.91	–
Talc, dom., grd. New York bgs., c.l., works	ton	84.00	–
99.5%, 325 mesh, bgs., c.l., works	ton	84.00	90.00
Talc, dom., 99.5%, 400 mesh, micronized, bgs., c.l., works	ton	187.00	238.00
625 mesh, micronized, bgs., c.l., works	ton	200.00	–
dom., ord., Calif. grd., bgs., c.l., works	ton	90.00	–
ord., Vermont, off-color grd., bgs., c.l., works	ton	136.00	–
Imp., Canadian, grd., bgs., c.l., works	ton	70.00	84.00
Tall oil, crude, Southeast, tanks, works, frt. equald.	ton	175.00	195.00
Tall oil, refd., acid, same basis	lb.	.31	–
dist., tanks, same basis	lb.	.21	.23
Tall oil acids, 2% or more rosin, tanks, works, frt. equald.	lb.	.23½	.25½
less than 2% rosin acid	lb.	.27	.28
Tallow (see Oils, Fats & Waxes market report.)			
Tallow, fatty acids, tech., non-ret. dms., c.l., divd.	lb.	.37	.40
tanks, divd.	lb.	.29	.45
hydrogenated, tech., flake, bgs., c.l., divd.	lb.	.37	.33
tanks, divd.	lb.	.35	.42
Tangerine oil, Fla., dms. f.o.b	lb.	10.50	11.00
Italian, dms.	kilo	35.00	–
Tankage, animal feeding, 9-11%, NH_3, New York, bulk	unit-ton	5.50	–
Tankage, fert. grade (see Nitrogenous process tankage).			
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	6.09	–
tech., powd., dms.	lb.	4.62	–
Tar acid oil, 15-18% t.l., dms., f.o.b works	gal.	1.40	–
25-28%, t.l., dms., f.o.b. works	gal.	1.59	–
50-53%, t.l., dms., f.o.b. works	gal.	1.87	–
Tartaric acid, NF, bgs.	lb.	1.20	1.50
Tellurium, metallurgical, f.o.b. works	lb.	12.00	–
Terpin hydrate, NF, imp., cryst., powd., 35 kilo drums, f.o.b. ship. pt., frt. equald.	lb.	1.35	–
Terpineol	lb.	1.10	1.50
Terpinyl acetate, extra, dms	lb.	2.40	–
prime, dms.	lb.	1.35	2.05
Terpinyl propionate, dms.	lb.	4.50	–
Tetrachloroethylene, tech. (see Perchloroethylene).			
Tetrachloroethylene, USP, dms., c.l., t.l., works	lb.	.30¼	–
Tetraethyl orthosilicate, bulk, f.o.b. works	lb.	1.53	1.68
Tetraethylene glycol, tanks, frt. alld.	lb.	.67	–
Tetraethylene glycol diacrylate, t.l. dms., f.o.b. works	lb.	1.50	–
Tetraethylenepentamine, tanks, same basis	lb.	1.70	1.75
Tetraethylthiuram disulfide, tech., flake, dms., t.l., frt. alld.	lb.	.88	2.07
Tetrahydrofuran dms., c.l., t.l., f.o.b. works	lb.	1.02	–
tanks, same basis	lb.	.98	–
Tetrahydrofurfuryl alcohol tanks, f.o.b. Memphis, Tenn.	lb.	.78	–
Tetrahydrolinalool, syn., dms.	lb.	7.20	–
Tetrahydrophthalic anhydride dms., c.l., t.l. f.o.b. works	lb.	.65	–
Tetrapotassium phosphate (see Potassium phosphate, tetrabasic).			
Tetrasodium pyrophosphate (see Sodium pyrophosphate, tetrabasic.)			
Thallium metal, divd.	lb.	35.00	–
Thallium sulfate, 99%, bots., divd.	lb.	5.00	10.00
Theobromine, bulk f.o.b. works	lb.	4.00	4.50
Theophylline, USP, anhyd. 50-kilo dms., 10,000-kilo lots	kilo	12.00	12.95
Thiamine hydrochloride, USP 100-kilo dms., divd	kilo	27.00	31.00
Thiamine mononitrate, USP, 100-kilo, dms., divd	kilo	27.00	31.00
[illegible] toners, molybdated, PMA, dms	lb.	5.40	6.05
tungstated, PTA, dms.	lb.	5.60	5.85
Thioglycolic acid, refd., dms., ton lots [illegible] basis	lb.	2.07	–
[illegible], dms., frt. alld.	lb.	7.50	–
refd. dms., frt. alld.	lb.	5.08	6.12
Thionyl chloride, high-purity, 99.6%, 24,000-lb. min. t.l., dms. frt. equald.	lb.	.55	–
Thorium nitrate, purif., dms., 100-lb. lots or more, works	lb	2.75	–
dl-Threonine, dms 10 kilos wks.	kilo.	128.00	–
Thyme leaves, French, bgs.	lb.	90	.95
Spanish, bgs.	lb.	.68	1.10
Thyme oil, NF, red, dms.	kilo	12.00	–
NF, white, dms.	kilo	22.00	–
Thymol, NF.	lb.	3.75	6.15
Thymol iodide, dms., 100-lbs. f.o.b. works	lb.	52.30	56.20
Tin metal (NY composite)	lb.	N.A.	–
Titanium dioxide, anatase, bgs., 20-ton lots, frt. alld	lb.	.73	.74
slurry shipments, 50-ton lots, dry basis, frt. alld.	lb.	.72	.74
Titanium dioxide, rutile, reg., bgs., 20-ton lots, frt. alld.	lb.	.78	–
slurry shipments, 50 ton lots, dry basis, frt. alld.	lb.	.80	–
Non-chalking rutile material costs 1c. per pound more.			
Titanium hydride powd. electronics grade, dms.	lb.	26.50	–
Titanium tetrachloride, tech., bulk, c.l., f.o.b. works	lb.	.30	.35
Titanium sponge, 99.3% fiber drums, less than 5,000 lbs. f.o.b. wks	lb.	4.85	–
200-gal cylinders c.l., same basis	lb.	.50	–
Tobias acid, 2,000 lbs. or more	lb.	2.45	–
d-a-Tocopherols, 67%, dms.	kilo	50.08	–
d-a-Tocopheryl acetate, 81% conc., dms.	kilo	57.49	–
d-a-Tocopheryl acid succinate, cryst., dms.	kilo	78.44	–
dl-a-Tocopherol, dms.	kilo.	27.40	–
dl-a-Tocopheryl acetate, USP 50-kilo dm. 1000 kilo min.	kilo.	16.00	18.50
50% dry powd., 50-kilo dm.	kilo	17.00	–
Tolu balsam, cns.	lb.	7.60	8.68
Toluene, petroleum, ind. or nitration, tanks			
Atlanta, Ga., divd.	gal.	1.35	–
Bayonne, N.J., divd.	gal.	1.32	–
Baytown, Tex., f.o.b.	gal.	1.37	–
Chicago, Ill. divd.	gal.	1.2823	–
Clairton, Pa., f.o.b.	gal.	1.15	–
Deer Park, Tex., f.o.b.	gal.	1.37	–
Ft. Wayne, Ind., divd.	gal.	1.34	–
Gulf Coast, spot, barges	gal.	.64	.66
Houston, Tex., divd.	gal.	1.22	–
New Jersey Metro, divd	gal.	1.32	–
Philadelphia, Pa., divd.	gal.	1.28	–
Providence, R.I., divd.	gal.	1.35	–
Toluene di-isocyanate (mixed isomers), 80% 2,4- and 20% 2,6-isomers, jumbo tankcars, divd.	lb.	1.01	–
p-Toluenesulfonamide, powd., dms., t.l., works	lb.	3.55	–
m-Toluidine, tech., bulk	lb.	3.10	–
o-Toluidine, tech., liq., dms. c.l.	lb.	.72	.75
bulk, same basis	lb.	.60	.64
p-Toluidine, tech. cast solid, dms., cl., works	lb.	1.80	1.85
Liq., tanks, same basis	lb.	1.70	–
flake, same basis	lb.	1.95	–
Toluidines, mixed, o-m-p, tech., liquid, c.l. f.o.b. works	lb.	1.03	–
bulk same basis	lb.	.95	–
Tolyltriazole, dms., 1,000-lb. lots, f.o.b. Cincinnati, Ohio	lb.	2.90	–
Tonka beans, Angostura, prime, 1,000-lb. lots	lb.	6.50	–
Toxaphene, dms., c.l., t.l., works	lb.	.38	–
Tragacanth gum, No. 1, ribbons, cns.	lb.	38.00	40.00
flaked powder	lb.	12.50	15.00
Triacetin tanks, divd. E	lb.	.75	–
Tributyl citrate, t.l., drums, f.o.b., works	lb.	1.70	–
Tributyl phosphate, tanks, works	lb.	1.65	1.77
Tributylamine, dms., c.l., divd.	lb.	1.39	–
tanks, same basis	lb.	1.33	–
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b., works	lb.	.94	–
USP, 100-lb. dms., frt. equald.	lb.	.99½	–
1,2,4-Trichlorobenzene, pure, tanks, divd	lb.	.61½	–
1,1,1-Trichloroethane, tanks, consumers, divd.	lb.	.40½	
1,1,2-Trichloroethane, tanks, f.o.b. works	lb.	.42	–
Trichloroethylene, tanks, divd.	lb.	.38½	–
Trichloroisocyanuric acid, dms.	lb.	1.25	–
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate, 65%, soln., non-ret. dms., 1,500-lb. lots, divd.	lb.	1.35	–
Tricresyl phosphate, tanks, f.o.b. works	lb.	1.55	1.60
Tridecyl alcohol, mixed isomers, tanks, divd.	lb.	.57	–
Triethanolamine, 85%, tanks, divd. E.	lb.	.45	.48
99%, tanks, same basis	lb.	.45	.48
Triethanolamine lauryl sulfate, tanks, f.o.b. works	lb.	.27¼	.27½
Triethylamine, dms., c.l., divd.	lb.	1.33	–
tanks, same basis	lb.	1.20	–
Triethyl citrate, t.l., drums, f.o.b., works	lb.	1.82	–
Triethyl phosphate, tanks, divd.	lb.	1.15	–
Triethylene glycol, tanks, f.o.b. Gulf	lb.	.47	–
Triethylene glycol dipelargonate, tanks f.o.b. works	lb.	.29½	–
40-60% tanks, 100% basis, frt. equald.	lb.	.35	–
Triethylenetetramine tanks, frt. equald.	lb.	1.43	1.45
Tri-iso-tolyl trimellitate, f.o.b. works	lb.	.51	.55
Tri-isobutylene, tanks, divd.	lb.	.45	–
Tri-isopropanolamine, dms., c.l., frt. alld. E.	lb.	.57½	–
Trimethylamine, anhyd., tanks, frt. equald., 100%	lb.	.64½	–
25% soln., tanks, frt. equald., 100% basis	lb.	.63½	–
40% soln., tanks, frt. equald., 100% basis	lb.	.56½	.57
Trimethylolpropane bgs c.l. t.l. divd.	lb.	.73	–
Trimethylolpropane triacrylate, t.l. dms., f.o.b. works	lb.	1.50	–
Tripentaerythritol, tanks, frt. alld., E.	lb.	1.00	–
Triphenyl phosphate, dms., t.l., frt. equald	lb.	1.84	.78
Tripropylene glycol tanks, frt. alld. E	lb.	.64	–
Tris-(hydroxymethyl)nitromethane, solid, t.l. works	lb	.605	–
Trisodium phosphate (see Sodium phosphate, tribasic)			
l-Tryptophan, dms, 25 kilo lots	kilo	62.00	65.00
Tung oil, tanks, imp. New York	lb.	.42	.43
Tungstic acid 99%, dms., 1,750-6,000 lbs., works	lb.	12.85	–
Turmeric, Alleppey	lb.	.35	1.10
Turpentine, crude sulfate tanks, f.o.b. Southeast works	gal.	.70	.80

U

Ultramarine blue pigments, 550-2,000 lb.-lots, works	lb.	1.30	–
violet, same basis	lb.	2.20	–
Umber pigment, burnt, American, frt. equald.	lb.	.13½	.15½
raw, American, dom., bgs., l.c.l., same basis	lb.	.13½	.14¾
Undecylenic acid, dms., works	lb.	2.70	–
Urea, 46% N, ind., bulk, 50-ton c.l., divd.	ton	200.00	220.00
46% N, agricultural, bulk, divd. Midwest	ton	200.00	215.00
46% N, agricultural, bulk, divd. West	ton	210.00	–
Uva-Ursi leaves, bls.	lb.	.22	–

V

Valerian root, Belgian, bgs.	lb.	.65	.85
Indian, bgs.	lb.	.45	–
Vanadium oxytrichloride, 3,000 lb. cyls., works	lb.	5.00	5.10
Vanadium pentoxide, tech., gran., per lb. of V_2O_5, 550-lb. dms., works	lb.	4.10	4.94
fused or flake, per lb. V_2O_5, 550-lb. dms., works	lb.	3.35	3.65
Vandyke brown, bags, t.l., frt. equald.	lb.	.27¼	–
Vanilla beans, Madagascar	lb.	37.00	–
Java, tins	lb.	27.00	30.00
Vanillin, USP, dms., f.o.b works	lb.	6.25	–
Imp., dms.	lb.	4.75	5.00
Versinol Ag	lb.	.64	–
Vetiveryl acetate, dms.	kilo	60.50	–
extra	lb.	63.00	–
Vetiver oil, Bourbon, dms.	lb.	16.00	17.00
Haitian	lb.	23.00	24.50
Java	kilo	31.00	–
Victoria blue toners, molybdated, PMA dms.	lb.	6.20	6.30
tungstated, PTA, dms.	lb.	10.40	–
Vinyl acetate monomer, tanks, divd.	lb.	.39	–
Vinyl chloride monomer, polymer grade, tanks, f.o.b. works	lb.	.28	–
Vinyl ether, USP, anesthesia, 75-cc. bots., hospitals	bots.	1.56	–
2-Vinylpyridine t.l., dms. works	kilo.	7.81	–
tanks, works	kilo.	7.61	–
Vinyltoluene, bulk, f.o.b.	lb.	.67	.73½
Vitamin A, synthetic, dry, pharm., 500,000 A units per gm., 50-kilo. lots	kilo	33.00	–
Vitamin A, liq. in oil, pharm., 1,000,000 A units per gram, 10 kilo lots	kilo	41.00	–
Vitamin A, feed grade, 650,000 units per gm.	kilo.	18.70	23.86
Vitamin B_1 (see Thiamine hydrochloride).			
Vitamin B_2 (see Riboflavin and Yeast).			
Vitamin B_{12}, cryst., non-sterile, USP (cyanocobalamin), vials, 50-gram, lots	gram	8.00	9.75
Vitamin B_{12}, 1% trituration of cryst. B_{12} (cyanocobalamin USP) with dicalcium phosphate, 25-kilo dms.	kilo.	10.75	12.75
Vitamin B_{12}, 0.1% trituration of cryst. B_{12} (cyanocobalamin USP) with mannitol, 25-kilo. dms.	kilo.	15.60	–
Vitamin B_{12}, cobalamin concentrate NF with mannitol, 1,000 mcg. per gram, dms.	per gram activity	19.45	–
Vitamin B_{12}, 1% Vitamin B_{12}, USP, absorbed on resin, 5-kilo dms., 500-gram lots, frt. alld.	per gram activity	15.65	–
Vitamin B_{12}, 1% cobalamin concentrate, NF, absorbed on resin, 5-kilo dms., frt. alld.	per gram activity	15.40	–
Vitamin B_{12}, 1% cyanocobalamin in gelatin, 2.5-kilo dms., frt. alld.	per gram activity	15.40	–
Vitamin C (see Ascorbic acid).			
Vitamin D (see Cholecalciferol)			
Vitamin D_2 (see Codliver and Fishliver oils).			
Vitamin E (see a-Tocopherol and Wheat germ oil).			
Vitamin H (see Biotin).			
Violet methyl toner (see Methyl violet toner)			

W

Warfarin 0.5%, dms., ton lots, frt. alld. New York or Chicago	lb.	.75	–
Wheat germ oil, cold-pressed	gal.	16.50	17.50
cold-processed	gal.	14.00	–
White precipitate, USP, powd., 100-lb. dms., f.o.b. works	lb.	7.892	11.24
Whiting (see Calcium carbonate).			
Wintergreen oil, syn. (see Methyl salicylate).			
Witch hazel bark, bls.	lb.	1.25	–
leaves, bls.	lb.	1.50	–
400 mesh, bgs., c.l. works	ton	134.00	–
325 mesh, bgs., c.l. works	ton	117.00	–
high aspect ratio, bgs., works	ton	164.00	–
Wollastonite, t.l., f.o.b., producing plant, general grade	ton	200.00	–
325 mesh	ton	140.00	141.00
400 mesh	ton	160.00	–
1250 mesh	ton	500.00	–
Wool grease, USP (see Lanolin).			
Wormseed oil (see Chenopodium oil, NF)			
Wormwood oil, cns.	lb.	31.00	36.00

X

Xanthan gum, food 300-lb. dms., f.o.b. works	lb.	6.65	6.20
ind., grade, same basis	lb.	4.54	–
Xylene, petroleum, ind. or nitration, tanks			
Alliance, La., f.o.b.	gal	1.08	–
Atlanta, Ga., divd.	gal.	1.35	–
Bayonne, N.J., divd.	gal	1.36	–
Bayonne, N.J. f.o.b.	gal	1.31	–
Baytown, Tex., f.o.b	gal	1.40	–
Chicago, Ill., divd	gal.	1.30	–
Clairton, Pa.	gal	1.22	–
Ft. Wayne, Ind., divd.	gal	1.37	–
Gulf Coast, spot, barges	gal	.77	.80
Houston, Tex., divd	gal	1.25	–
New Jersey Metro, divd	gal	1.36	–
Xylene, petroleum, ind. or nitration, tanks			
Philadelphia, Pa., divd.	gal	1.36	–
Providence, R.I., divd	gal	1.42	–
South Bend, Ind., divd	gal.	1.37	–
m-Xylene, high purity, tanks, f.o.b. Texas City, Tex.	lb.	.36	–
o-Xylene, tanks, works	lb.	.125	.145
p-Xylene, tanks, divd.	lb.	.195	–
m-Xylenediamine, dms., t.l., f.o.b. works	lb.	1.70	–
2,4-Xylidine, tech., liq., c.l., t.l. f.o.b. works	lb.	1.50	–
Xylidines, mixed, o-m-p., dms., c.l., t.l., f.o.b. works	lb.	1.00	–

Y

Yara yara, 25-lb. cns.	lb.	2.81	–
Yeast, pure brewer's debittered, NF, Saccharomyces, t.l., f.o.b. works	lb	1.10	–
Yerba, santa leaves, bls.	lb.	2.40	–
extra, bots.	lb.	26.50	31.75
Ylang-ylang oil, extra grade	lb.	23.93	–
grade 1	lb.	19.09	–
grade 2	lb.	15.90	–
grade 3	lb.	13.04	–

Z

Zein, bgs., 2,000-lb. lots	lb.	7.50	9.30
Zinc acetate, NF, dms.	lb.	1.00	1.78
tech., dihydrate, bgs., t.l., works	lb.	1.50	–
Zinc borate, tech., 43% ZnO, 37% B_2O_3, 50-lb. bgs., 20,000-lb. t.l., f.o.b. works	lb.	.55	–
cryst., 37% ZnO, 49% B_2O_3, 250-lb. dms. 20,000 lbs. t.l. f.o.b. wks.	lb.	.89	–
Zinc chloride, USP, gran., dms.	kilo	9.79	–
Zinc chloride, tech., soln. 50%, tanks, f.o.b. Cleveland, Ohio	100 lbs.	20.20	–
Concord, N.C.	100 lbs.	20.20	–
Freeport, Tex.	100 lbs.	20.20	–
Old Bridge, N.J.	100 lbs.	20.20	–
65 degree, same basis Cleveland, Ohio	100 lbs.	27.90	–
Concord, N.C.	100 lbs.	27.90	–
Old Bridge, N.J.	100 lbs.	27.90	–
70 degree, same basis Cleveland, Ohio	100 lbs.	29.70	–
Concord, NC	100 lbs.	29.70	–
Old Bridge, NJ	100 lbs.	29.70	–
72 degree, same basis Cleveland, Ohio	100 lbs.	33.20	–
Concord, NC	100 lbs.	33.20	–
Old Bridge, NJ	100 lbs.	33.20	–
Zinc chromate, bgs., divd.	lb.	1.12	–
Zinc cyanide, dms., c.l.	lb.	1.65	2.14
Zinc dust pigment type 1 & 2, dms., c.l., f.o.b. plant	lb.	.59	.67
Zinc ethylenediamine tetracetic acid, 8.4% Zn., ammonia salt soln., t.c., t.t., f.o.b. works	lb.	.66	–
9% Zn., ammonia salt soln., t.c., t.t., f.o.b. works	lb.	.48	–
Zinc fluoborate, liq. conc., dms., t.l., works, frt. equald.	lb.	.27	.38
Zinc metal, high grade, divd.	lb.	.33	–
Zinc naphthenate, liq. 8% Zn, dms., divd	lb.	.95	–
Zinc nitrate, tech., flake 300-lb. dms.	lb.	.34	.36
Zinc oxide photo conductive, bgs., c.l., frt. alld.	lb.	.47¾	.56½
Zinc oxide, USP 50-lb. bxs., c.l., frt. alld.	lb.	.46½	.59½
Zinc oxide pigment, American process, lead-free bgs., c.l., frt. alld.	lb.	.40	.49
Zinc oxide pigment, French process regular, bgs., c.l., frt. alld.	lb.	.41	.51
Zinc phenolsulfonate, purif., gran., 250-lb. dms., t.l., frt. alld.	lb.	1.82	–
Zinc pyridinethione, 48% dispersion, dms., f.o.b. works	lb.	8.50	8.80
Industrial grade		14.50	–
Zinc resinate precip. 7.2-7.6% Zn, dms., frt. alld.	lb.	.46	–
Zinc silicofluoride, dms., c.l., t.l., works	lb.	.17	.2850
Zinc stearate, USP, bulk, t.l.	lb.	.92	1.49
Zinc sulfate, gran., monohydrate, indust. grade 36% Zn., bgs., c.l., works	100 lbs.	26.50	29.00
agricultural grade powd., bulk, same basis	100 lbs.	22.50	–
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	lb.	.42	–
Zinc undecylenate, dms., works	lb.	4.67	4.70
Zinc-formaldehyde sulfoxylate, basic 200-lb. dms., frt. alld.	lb.	1.05	–
Zircon gran. bgs., bulk c.l., works	ton	165.00	177.00
Zircon milled bgs., 200 and 325 mesh, c.l., works	ton	225.00	–
Zirconium acetate soln., 25% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.97	–
22% ZrO_2, same basis	lb.	.78	–
Zirconium hydride, powd., electronic grade, dms., works	lb.	.31	.75
Zirconium oxide, powd., coml., dms., 2,000 lbs. min.	lb.	4.25	–
electronic, same basis	lb.	7.25	–
insulating, stabilized, 325°F same basis	lb.	3.31	3.62
insulating, unstabilized, 325°F same basis	lb.	3.58	3.75
dense, stabilized, 30F, same basis	lb.	2.82	–
Zirconium oxychloride liq., dms. 5-ton lots, works	lb.	.91	1.04

Biotechnology Reform Bill

Continued from Page 5

rather than the products created from the technology."

He called the proposed approach "a radical and unfair departure from other industries" because the majority of products using the new technologies will not be substantially different from existing products regulated under existing laws.

"IBA believes, at this stage, product-specific review—on a case-by-case basis—is desirable and has worked in the past," Mr. Godown said. "Unreasonable regulation can stifle innovation and hinder the ability of US firms to compete in a world economy."

President Reagan recently approved a new Federal policy for regulating biotechnology under several existing laws. IBA, which has requested government regulation of its products, has endorsed the idea of coordinated regulation that permits companies developmental freedom while assuring the public that the commercial use of biotechnology is safe.

In his testimony, Mr. Godown characterized a petition filed with EPA by genetic engineering critic Jeremy Rifkin, asking for immediate imposition of financial responsibility standards, as "a product of careless draftsmanship."

"There is no statutory basis on which the agency could possibly base such action," Mr. Godown told the lawmakers. "To construct an insurance requirement or an entire regulatory system on the basis of pure conjecture, or unreasonable fear—rather than on scientifically based probabilities—could throttle an extremely important industry still in its early stages," he said.

Biotechnology opponents advocate tight regulation because they believe there is a risk that some genetically engineered products released in the environment could survive and multiply, causing unforeseen and perhaps serious environmental problems.

Rep. Fuqua said his bill is needed because "there is no uniform, well-considered Federal policy toward the deliberate release of genetically engineered organisms.

"Instead, the agencies are relying on a piecemeal approach that uses existing laws not written with genetically engineered organisms in mind."

Jack Doyle of the Environmental Policy Institute, a biotechnology critic, told the panels that "EPA is the only Federal agency that has a clear mission for environmental protection" and ought to house a Biotechnology Science Board to review all genetically-engineered organisms destined for commercial uses in the environment.

Mr. Doyle accused the Reagan Administration of being "willing to play Russian roulette" by exempting certain kinds of genetically-engineered organisms from regulation under the new Federal guidelines.

He also charged that the Administration was trying "to keep EPA from assuming the lead on the deliberate release question," while pre-empting Congress from writing new legislation.

"EPA should be at the center of the 'deliberate release' regulatory system," Mr. Doyle told the subcommittees, "not any White House entity."

AARON EQUIPMENT COMPANY

DIVISION ARECO, INCORPORATED
735 EAST GREEN STREET
P.O. BOX 80
BENSENVILLE, IL 60106

(312) 350-2200

TX 28 9454 · CABLE AARONEQCO

Liquidations Our Specialty . . . . . .

CALL US WITH YOUR SURPLUS EQUIPMENT LIST

LARGE QUANTITY PRESSURE TANKS

Used 30,000 gal. Propane Tanks 9' dia. x 62' lg., dish heads 200 psi ASME. (48)
Used 15,000 gal. Butane Tanks 9' dia. x 31' lg., dish heads, pressure rated. (33)

MUST MOVE . . . PRICED TO SELL!
Call: (312) 350-2200

REACTORS

20252-Unused Reactor, 600 gal., 304SS dimple jktd.
10136-Pfaudler, 800 gal., T-316 L SS, 55 PSI int/150 PSI.
15095-Hicks, 1023 gal., 304 SS, dimple jkt., 150 PSI, 75 PSI & FV 370F.
20909-Brighton reactor, 2000 gal., 316L SS, full dimpl. jkt.
20928-Brighton, 4000 gal., 8' dia. x 10', 316 ELC S/S
20456-Reactor, 4,000 gal., 316 S/S, 8' dia. x 7'9" st. side.
15475-Brighton, 4000 gal., 316SS, vacuum.
20287-GH Hicks, 4000 gal., 316 SS, pipe coil jkt.
20923-Richmnd Eng. Reactor, 4600 gal., T316 stain/clad.
17927-Unused, 6000 gal., titanium clad, coil jkt., 150 PSI, intern. 15 PSI & FV.
20250-Pritchard, 7000 gal., T304L SS, 120½" dia. x 96" st.
Pfaudler 10,000 gal. reactors T316L, 100 psi int, 160 psi jkt., agit. (7)
Pfaudler 15,000 gal. reactor T316L, 100 psi int., 200 psi jkt., agit. (3)

TANKS-S/S

21131-Tank, 950 gal., T304SS, 5'x6' dish bot., flat top, agit.
21283-Tank, S/S vert., 1200 gal., 6' dia.x8', flat top & bot.
21277-Tank, vert., 2500 gal. S/S, 6'dia.x12'H, flat top & bot.
17474-1000 gal., T316SS, 54" dia.x8'6". 3 HP agitator.
20651-Tank, SS, 9000 gal., agit., 12' dia. x 14'6" H.
20655-Tank, SS, 12000 gal., 12' dia. x 14', flat bottom, open top.
17043-Jos Oat horz. tank, 304SS, 16,000 gal., 12'6" dia. x 22'9½" long, 10 PSI.

DUST COLLECTORS

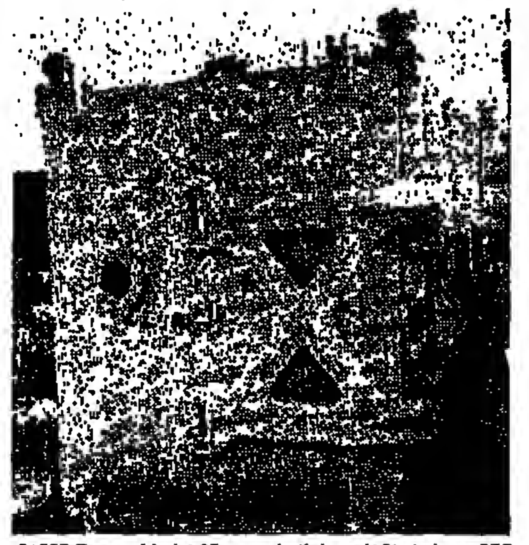
21125-Fabri-Jet jdl. SQ9-4B bin vent, 42 sq. ft.
16398-Mikro dust collector, S/S, 63 sq. ft., mdl. 9-6-100, pulse jet.
21153-EVO. bin vent, 72 sq. ft., S/S, 5 HP
21145-Dust Collector, 90 sq. ft., vert. CS, 10 HP
20253-Unused EVO pulse jet collector, mdl. 84BF009C, 90 sq. ft.
503563-Unused EVO dust collector, mdl. 99-FV0085, 102 sq. ft.
21192-JH Day mdl. RJ-18RJ36, 125 sq. ft., CS, 3 HP.
21222-Fabri-Jet, mdl. SQ16-80, 151 sq. ft.
20398-Pulse jet collector, "FlexKleen," mdl. 58CT24 AV II w/175 sq. ft., cloth, C.S.
21286-Mikro dust collector, 285 sq. ft., S/S.
20256-Unused EVO Corp. pulse jet dust collector, mdl. 99BF030C, 350 sq. ft.
20332-Flex Kleen dust collector, pulse jet, mdl. 84BVS3611, 360 sq. ft.
20255-Unused EVO Corp. dust collector, shaker type, mdl. MS049C10, 575 sq. ft.

SCREENS

21203-Sprout Waldron sifter, D10, 6 decks.
21150-Sprout Waldron, D10, 1 HP, 10 decks, S/S cont.
21167-Sprout Waldron, D10, 2HP, 10 decks, S/S cont.

JUST PURCHASED

21467-Heat Exchanger, 100 sq. ft., vert. all S/S
21465-Tank, S/S, 38" dia. x 46".
21466-Pfaudler G/L 50" tank.
21437-Sandvik 4'x100' S/S belt flaker (4)
21438-Western States 48"x30", perf. S/S basket centrifuge. (4)
21440-Mueller 500 gal. kettles, S/S, jkt. (2)
21442-Fitzmill FASO-20, jkt., S/S. (8)
21445-Rotex Screen 42"x84", single deck. (12)
21447-York cent. refrig. compressor, 900 HP. (5)
21446-York cent. refrig. compressor, 500 HP. (2)
21449-C/P Air Compressors, 125 HP. (3)
21452-flex Kleen dust collector. (2)
21451-Rex 18" vibratory S/S feeder. (2)
21454-Votator 3-cylinder 6"x48", S/S. (10)
21443-Mueller Tanks, 250, 400 & 700 gal. S/S.
21409-Lawton 500 ton molding press. (2)
21410-Lawton 300 ton molding press (8)
21338-Davenport 6'x40' Steam tube dryer, T316 L SS, 2250 sq. ft., w/motor
21327-Henschel FM150, S/S, jkt., 3.5 cu. ft., w/motor.
21350-B.P. 500 gal., #20 TEUM, Sigma, jkt., 150 HP, steel.
21620-Pfaudler 25 sq. ft. evap. SS, internal condenser.
21327-Henschel FM 150 mixer, SS, jkt., control.
21315-Stewart Bolling 2 roll mill, 24"x84" unitized.
21316-Farrell #9 FMC mixer w/motor & controls.
21331-Farrell 24"x84" 2 roll mill, unitized.
21330-Cumberland 7" dicer w/approx. 30 HP.



21397-Devine Mod.#25 vac. shelf dryer (13) shelves, 356 sq. ft. Double door (30)

MIXERS – PLOW

503755-Littleford, FKM 600D, SS jacketed, 25 HP.
20754-Littleford, FKM 3000D 65 CF, S/S, full jacket.
19214-New Plow Mixer, 80 cu. ft. 347SS, jacket, 100HP.
20829-Littleford FKM 4200D, S/S, 87 cu. ft. JKT.

MIXER/EXTRUDER

17654-AMK 25 gal. Mixtruder, Sigma, ST 7.5 HP.
18298-J.H. Day 25 gal. Dispersion, 25 HP vari main, 10 HP vari screw.
20998-AMK 30 gal. S/S, jkt. Sigma, 7.5 HP Main, 6 HP screw.
21334-Ross 40 gal., S/S hot oil jkt., Sigma 6" disch. screw.
19826-AMK 50 gal. ST, jkt., Sigma.
19421-AMK 75 gal. ST, jkt., Sigma, 10" disch. screw.
20744-J.H. Day 100 gal., S/S, Sigma, jkt. 40 HP vari main, 20 HP vari screw.
21459-B.P. 300 Gal. steel, jkt., 100 HP, vac. sigma, late model.

J.H. Day 150 gal., Mixtruder, S/S, jkt., 75 psi, w/drives. Reconditioned.
CALL: STEVE JAKUBIAK (312) 350-2200

17136-AMK 120 gal., ST Sigma, 11.5" screw.
14832-AMK 150 gal., S/S, Sigma 15HP main, 10HP screw
19494-AMK 150 gal., S/S Sigma, 50 HP main, 10HP screw
20116-AMK 150 gal., ST, Sigma, 15 HP/10 HP
503527-New Aaron 300 gal., T304SS, mix extruder, Sigma, jkt., up to 200 HP main, 75 HP hyd. screw.
STILL INSTALLED . . . CALL NOW!

21350-B.P. 500 gal. Sigma steel, jkt. 25 speed, 150 HP, Hyd. tilt

FILTER-ROTARY VAC.

15628-FE.Inc. 36" dia.x12", S/S, string disc., 1/2 HP.
17477-FE, Inc., 3' dia x 6', T316SS, belt disc., vac pump.
11177-Dorr Oliver S/S, 5' dia. x 6'L.
11653-Oliver T-316SS, precoat 5'3"x8'.
19226-Elmco valveless precoat, 6' dia. x 6' face, S/S drum.
19431-K.S. flexibelt, 6' dia. x 6' face, 316SS.
18392-Elmco belt filter, 8'x10', steel drum, w/Nash pumps.
15827-Ametek, 8' dia.x14'0" face, maxi-belt, S/S.
17936-Elmco, 316SS, 10' dia. x 14', knife discharge.
17283-Impco belt filter, 12' dia. x 12', 304SS, Nash vacuum pump.
20251-K.S. T304, vacuum filter, 12' dia x 14', 304SS, flexi-belt.
20323-Dorr Oliver 11'6"x16' face, S/S cont. parts.
11486-Elmco 10'x10' rotary vac. filter.

DRYER-ROTARY VAC.

19844-Bethlehem Porcupine Processor/Polyester Chip Crystallizer 30" dia. x 18' long, T304 SS, jkt, 20 HP (6) available.
Strong Scott Solidire 24" dia. x 16', S/S, jkt. No mtr.

FILTER PRESSES

19846-Shriver P&F filter press, 12"x12" alum. plates, closed delivery, 23 chambers.
20534-Sperry Filter Press, 30", alumn.
20539-Sperry filter press 30", 35 Aluminum plates, 357 sq.
15370-Shriver 32" x 32", polypropylene, 27 plates, ratchet closing.
15929-Shriver ALP, plate & frame, 18 36" x 36", S/S recessed plates.
19799-Clow/Bethlehem filter press, 36", recess plates, 26 chambers.
20076-Sperry filter press, 36", cast iron plates, closed deliv.
19462-Independent filter press, 42" x 42", polypropylene, 4 eye closed, 34 chambers.
20550-Sperry filter press, 42" Ehcl closer, 41 alum. plates.

UNUSED CENTRIFUGES

21593-Sharples P5400 Sanitary Centrifuges w/200 HP motor, 25 HP backdrive, gearbox, 5" pitch conveyor, CIP, control panel (2) LATE MODEL
CALL: Ken Kyte (312) 350-2200

CENTRIFUGES

20827-Bird, 18"x24" steel, conical bowl.
20824-Bird, 18"x28" stel, conical bowl (5).
20826-Bird, 24"x38" steel, con. bowl, gearbox.
20819-Bird, 24"x38", S/S, 15 degree, contour bowl.
20684-Bird 24"x60", H series, steel w/motor.
20364-Bird 32"x 50", SS T316 contour, 75HP.
12683-Bird 36"x96" contour, 10 deg., T317 ELC.
16753-Alfa Laval, S/S, NX-214-31B, gearbox, 20 HP.
20337-Alfa Laval, NX 314, S/S, gearbox, 20 HP.
20137-Alfa Laval, NX 418-B31-60, 316SS, gearbox.
17308-Dorr Oliver, 304SS, Merco mdl. 16L, 30 HP.
13565-Sharples, mdl. P 600, gearbox, motor.
19767-Unused Sharples, 3 phase, P3000, S/S, carbide.
20407-Sharples P2000 316SS, 20 HP drive motor.
19768-Unused Sharples P3000, S/S carbide tiles, gear.
21359-Sharples P3000 w/gearbox.
20686-Sharples P3000, 52:1 gearbox, S/S casting.
21337-Sharples SG-6(3400) Decanter, S/S, gearbox & mot.
17073-Sharples P3400, S/S, 125/1 gearbox.
19068-Sharples P3400, S/S, gearbox, 40 HP.
21725-Sharples, P3400, S/S, gearbox & motor.
19249-Sharples, P5400, 316/317SS, 200 HP, gearbox.

CENT-BASKET VERT.

20978-Sharples SP6500 Sludge-Pac, 48"x30" S/S w/hydro drives.
21408-Delaval 22"x16" perf. basket hyd. drive.
15815-Delaval Mark III, perf. basket, 40"x24", 316SS, 30 HP, hydr., drive.
19446-Sharples Sludge-Pak, SP-5500, 40"x24" basket centrifuge.
19253-Western States, 48"x30", S/S perf. basket, 50HP hydr. drive, reconditioned.

LIQUIDATION PERRYVILLE, MD.

20917-I.R. Air Camp SSR250 rot. screw, 250 CFM@ 125 psi.
20918-1000 gal. SS, 60" x 6'6" agit.
20919-3000 gal. SS, kettle, 84" x 10'4"H, agit. (2)
20922-2000 gal. SS, tank 72" x 9'H, 60#/FV
20923-4600 gal. reactor, 68" x 27'H, 200# int., 75# jkt, agit, 15 HP (4)
20925-3000 gal. tank, 84" x 10'4"H
20926-1000 gal. tank, 72" x 78"H, SS, 50 psi (2)
20927-500 gal. tank, 60" x 60"H, SS, 50 psi (2)
20928-5000 gal. tank, 8'6" x 20'10"H, 60#/FV.
20930-Ht. Exch. 848 sq. ft., SS, 8 pass. (2)
20931-Sweco 30" SS, 1 deck
20932-Sweco 48" SS, 1 deck.
20933-Pluse Clean 38-8, SS 1500 CFM, 346 sq. ft.
BUY NOW FROM LOCATION . . . SAVE!!

MIXER RIBBON

18454-JH Day ribbon, CS, 5 cu. ft., w/3 HP.
20311-JH Day ribbon, 7.5 cu. ft., steel, ½ HP.
21120-Ribbon Blender, S/S, 10 cu. ft., jkt. SS, 150 psi.
20276-Read ribbon blender, 14.7 cu. ft. 304SS, 3 HP.
20616-Unused Day, 316SS, 23 cu. ft., 5HP.
20189-Robinson, 25 cu. ft., S/S, jacket, 10 HP.
20985-Int'l 34 cu. ft. S/S dbl. ribbon, 5 HP. (4)
20212-Haas ribbon, 36 cu. ft., S/S, 15 HP.
19268-Ribbon Mix 80 cu. ft. T304 SS, 5 HP (4)
19566-Howe, 115 cu. ft., sanitary S/S, double spiral ribbon.
20983-Strong Scott blender, 130 cu. ft., 304SS, 25 XP gear motor.
18573-JH Day, 150 cu. ft., double ribbon, 25 HP.
21124-Ribbon Blender, 304SS jkt., 160 cu. ft., 30 HP.
19472-Marion paddle blender, 200 cu. ft., jacketed, 40 HP.
20614-Unused JH Day ribbon, S/S 270 cu. ft., 25 HP.
21114-JH Day ribbon blender, S/S clad, 76 HP, 480 cu. ft.

LIQUIDATION

PENN. LOCATION

20617-BP double arm mixer, 1200 gal. S/S jkt., 75 HP (2)
20618-Readco dbl. arm mixer, 1200 gal., 317SS jkt., 75 HP.
20619-Double arm mixer, 1200 gal., S/S jkt., 75 HP
20616-Unused JH Day ribbon blender, 23 cu. ft., 5 HP (2)
20615-Unused JH Day ribbon blender, 304SS 36 cu. ft., 7.5
20614-Unused JH Day ribbon blender, S/S 270 cu. ft., 25 HP.
20697-Sharples Super Centrifuge, AS-16P
20698-Sharples Super Centrifuge, AS-16V
20681-Luwa wipe film evaporator, 1.4 sq. ft., 2 HP.
20675-Heat exchanger, 116 sq. ft., kettle reboiler, 316SS
20676-Heat exchanger, 167 sq. ft., horz., 316SS
20678-Heat exchanger, 180 sq. ft., 316SS (2)
20677-Heat exchanger, 200 sq. ft., horz., 316SS.
20680-Heat exchanger, 268 sq. ft., vert., 316SS (2)
20668-Heat exchanger, 273 sq. ft., horz., 316SS (4)
20674-Heat exchanger, 515 sq. ft., vert., reboiler
20673-Heat exchanger, 870 sq. ft., horz., 316SS, U-tube. (2)
20672-Heat exchanger, 984 sq. ft., horz., 316SS
20667-Heat exchanger, 1178 sq. ft., horz., 316SS (2)
20679-Heat exchanger, 1380 sq. ft., horz., 316SS (2)
20670-Heat exchanger, 1540 sq. ft., horz., 316SS
20671-Heat exchanger, 2140 sq. ft., horz., 316SS
20675-Heat exchanger, 116 sq. ft., horz., reboiler 316SS
20678-Heat exchanger, 180 sq. ft., vert., 316SS (2)
20677-Heat exchanger, 200 sq. ft., horz. condenser, 316SS
20680-Heat exchanger, 268 sq. ft., vert. reboiler, 316SS (2)
20665-Heat exchanger, 374 sq. ft., vert., thermosyphon reboiler, titanium. (2)
20674-Heat exchanger, 515 sq. ft., vert. rosyphon reboiler, 316SS.
20666-Heat exchanger, 523 sq. ft., horz. 316SS (2)
20673-Heat exchanger, 870 sq. ft., horz. Kettle reboiler, 316SS U-tube (2)
20672-Heat exchanger, 984 sq. ft., horz., 316SS
20667-Heat exchanger, 1178 sq. ft., horz., 316SS (2)
20679-Heat exchanger, 1380 sq. ft., horz., 316SS. (2)
20670-Heat exchanger, 1540 sq. ft., horz., 316SS
20671-Heat exchanger, 2140 sq. ft., horz., 316SS
20696-Premier Media Mill, model 10RS SS, 40 HP.
20653-Patterson dbl. cone blender, 500 cu. ft., 304SS, 30 HP.
20649 Cowles, model 7VTV, 7.5 HP, hydraulic lift. (4)
20650-Manton Gaulin homogenizer/disperser, mdl. SMD75KL3, 75 GPH, 8000 psi max. (4)
20684-NFash vacuum pump CL3001, 150 HP
20683-Tank, 316SS, 385 gal., 3' dia. x 6'6", dish heads.
20659-Tank, SS, 750 gal., agit. vert., 5' dia. x5', dish bot., 2HP.
20656-Tank, 316SS, vert. 1500 gal. aagitated, 6' dia. x 7', 25/12.5 HP, two speed agitator. (12)
20658-Tank, S/S, 1500 gal. vert. agit. 6' dia. x 7' dish heads, 25 psi, 5 HP. (2)
20657-Tank, S/S, 4300 gal. vert., 9' dia. x 9', agitator, 2 HP.
20651-Tank, S/S, 9000 gal., agit. 12' dia. x 14'6", 2 HP.
20655-Tank, S/S, vert., 12000 gal., 12' dia. x 14', flat bottom.
20652-Tank, S/S, 20,000 gal., 14' dia. x 18' high, flat bottom flat top, 5 HP side agitator.

SPECIAL LIQUIDATION —SALE—

Kaiser Refractory Brick Plant
Gary, Indiana
Call for Detail List
(312) 350-2200

PRESSES

503881-Komarek Greaves, mdl. 75MSS briquetting press 20.5" dia. x 4.5" face.
13392-Fitzpatrick Chilsonator, 50 HP, mdl. HA-50-30-21.
20334-KR Komarek, 137 ton, mdl. B-400 briquetter.
16802-Stokes single punch press, 900-530-1 (14).
17224-Dorst compac., series TPA15, 20 tons.
10690-Stokes, mdl. R-4 press, 20 ton.

ARECO MIXERS IN STOCK

The following stainless steel double ribbon mixers are stock and available for quick shipment.

1–4 cu.ft.	2–36 cu.ft.	1–100 cu.ft.
3–14 cu.ft.	1–55 cu.ft.	1–150 cu.ft.
1–24 cu.ft.	1–80 cu.ft.	1–200 cu.ft.

All units arranged w/center bottom outlet. Dimple jacketed ... psi. ASME Code, custom covers, New or Used ... Drives can be furnished.
*Equipped w/air glands, FDA packing. Ready for ... shipment.
**Unit has 90 psi dimple jacket, arranged for end discharge.

CALL: STEVE or NORM for Prices (312) 350-2200

RIGGING/DISMANTLING DEMOLITION/ASBESTOS REMOVAL

WE ARE EXPERTS AT DISMANTLING, REERECTION, RIGGING DEMOLITION AND ASBESTOS REMOVAL WITH TERRIFIC REFERENCES BOTH NATIONALLY AND INTERNATIONALLY
CALL US TODAY FOR A QUOTATION ON YOUR CURRENT NEEDS OR ADD US TO YOUR BIDDERS LIST FOR ANY FUTURE PROJECT (201) 390-9550

$AVE $AVE **IDM** $AVE $AVE

ATTENTION
MOVING DAY SALE!

IDM IS MOVING TO A LARGER FACILITY AT A NEW LOCATION AND ARE PLEASED TO OFFER OUR ENTIRE INVENTORY AT REDUCED PRICES TO OUR MANY CUSTOMERS.
WE ARE HAPPY TO PASS ALONG ANY LOADING, TRUCKING AND UNLOADING SAVINGS TO YOU.
PLEASE CALL OUR OFFICE TODAY OR STOP-IN AND BROWSE AROUND OUR YARD.

ONLY 30 DAYS LEFT TO SAVE $$$$$

EQUIPMENT WANTED

GOOD, USED, CHEMICAL, PHARMACEUTICAL & RELATED EQUIPMENT - CENTRIFUGES, DRYERS, FILTERS, REACTORS, TANKS ETC.
WE WILL PURCHASE INDIVIDUAL ITEMS OR COMPLETE PLANTS.
CALL OUR OFFICE TODAY. TOP DOLLARS PAID. NO DEAL TOO BIG OR TOO SMALL.

DRYERS

Drum Dryers/Flakers
(1) 24" dia. x 36" Buflovac SS dble. drum dryer
(2) 32" dia.x 108" Blaw Knox CI dble. drum dryer
(1) 32" dia. x 17'6" Sandvik SS belt flaker
(1) 36" dia.x 10' Buflovak CI dble. drum dryer
(3) 42" dia.x120" Blaw Knox CI dble. drum dryer
(1) 48" dia.x 28" drum flaker, chrome plated drum
(1) 48" dia.x 40" CI flaker, mfg. by Buffalo Foundary
(1) 48" dia.x 40 drum flaker, nickel plated drum, mfg. Blaw-Knox

Fluid Bed
(1) 60 Kg. Aeromatic, Batch, 6'x9', 56,000
(1) 100 Kg. Aeromatic Model ST 100, sanitary SS
(1) Fitzpatrick Model FA 250, SS, 20 HP XP

Holoflite
(1) Western Precipitation Model P80SSO-A, twin screw, 12" dia. x 20' long, SS constr., jckt. rated 15 psi, complete with 7.5 HP vari-speed drive.
(1) New/Never-Used Joy Processor, CS, single screw, 16"x16' long, rated 110 psi @ 340° F., sprocket & chain drive by 1.5 HP varispeed drive.

Rotary Vacuum
(1) 200 Cu. Ft. Stokes, SS constr., complt.
(2) 165 Cu. Ft. Pfaudler, Double Cone, G/L, 30 &FV/50 psi jktd., 15 HP vari-drive
(1) 150 Cu. Ft. Blaw Knox, Nickel
(2) 132 Cu. Ft. Stokes, Nickel
(1) 72 Cu. Ft. Blaw Knox, SS
(1) 60 Cu. Ft. Titanium Double Cone
(1) 50 Cu. Ft. Gemco, 316SS sanitary, double cone
(1) 37.8 Sq. Ft. Horiz. Thin Film, vac. int. & 150 psig, 304/316SS
(1) 30 Cu. Ft. P-K Twin Shell, 304SS
(1) 20 Cu. Ft. Abbe Twin Cone, 304SS
(2) 20 Cu. Ft. P-K Double Cone, 304ELC

Spray
(1) 30"x3' Bowen Laboratory w/3' cone bottom, SS constr., w/centrifugal atomizer, 3 HP blower & motor.(1)
(1) Niro lab size 32"diax2'w/2'cone w/centrif. atomizer SS contacts
(1) 7'10" Dia. Anhydro Complete System, sanitary SS
(1) 8' Dia. Bowen, 304SS, natural gas fired
(1) 18' dia. Bowen complt. system SS contacts, new 1976

●●●TANKS-ALL TYPES & SIZES

CENTRIFUGES

(1) Unused Model B-10 Podbielniak, Alloy 20
(1) Sharples AS-26, SS
(2) Sharples AS-16P, 316SS
(1) Alfa-Laval SS Decanter, Horiz., Mdl. NX314
(2) Dorr Oliver Mdl. CH30 CSU "Merco," 316SS contacts, 150 HP
(1) Baker Perkins S-32 "Pusher Type," SS, 60 HP
(1) Bird 18" x 28", 316 ELC, contour bowl.
(2) Bird 24"x38", 316SS, 40 HP
(3) Sharples P-3000, 316SS, 30 HP
(1) Tolhurst 48" x 24" perf. basket, 316SS sanitary, auto. plow & discharge, rated 85#/cu. ft. @ 900 RPM, 20 HP XP.
(1) Tolhurst 48" x 24" Batchmaster, 316SS, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Tolhurst 48"x24" Batchmaster, rubber lined, perf. basket, w/hydr. plow & 20HP hydr. drive
(2) Tolhurst 48" x 24" Batchmaster, Heresite lined, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Fletcher 48"x 28" Suspended type, SS perf. basket, 20/10 HP
(1) Sharples Tornado 48" x 30", 316SS, perf. basket, 40 HP XP
(1) Westfalia Model SAMN 5036
(1) Alfa Laval Model MAPX 210 T24, SS wetted parts
(2) Sharples C-27, 316 SS, wetted parts, 40 HP
(1) Sharples C-20, Super-D-Hydrator, SS, 30 HP

PARTIAL LISTING ONLY

EVAPORATORS

(1) 1.4 Sq. Ft. Luwa Wiped Film, 316SS, 1.5 HP
(1) 1.4 Sq. Ft. Luwa thin film SS
(1) 5.4 Sq. Ft. Luwa filmtruder, 316 LSS
(1) 6.54 Sq. Ft. Votator Evaporator System 316 SS contacts, 15 psi & FV & int. 150 psi jkt.
(1) 8.7 Sq. Ft. Rodney Hunt Turbo-Film, 304 SS contact parts, 15 psi & FV/150 psi jckt.
(1) 10.8 Sq. Ft. Luwa SS Wiped Film Evap. System, 15/650 psi
(1) 19.5 Sq. Ft. Votator Turba-Film, 304 Sanit. SS FV/150 psi 10HP
(1) 20 Sq. Ft. Kontro Horiz. Adjust-O-Film, 316ELC, 50 psig, 15 HP
(1) Approx 31 Sq. ft. Vert., Turbo-Film Processor, 304 SS Contacts
(1) Like New 37.8 Sq. Ft. Luwa Horiz. Thin-Film Dryer, 304/316L SS
(1) 40 Sq. Ft. Kontro Adjust-O-Film, SS constr., 20 HP
(1) 47 Sq. Ft. Artisan rising Film, Hast. "C"
(1) Approx 51 sq. ft. Pfaudler Wipes film, 316 SS, 100/85 & FV
(1) 80 Sq. Ft. Kontro Wiped Film Syst., SS constr., FV/150 psi, 40 HP
(1) UNUSED 88 sq. ft. Luwa thin film dryer horiz. 316 L wetted parts, FV int., 150 psi sat steam jkt.
(1) 86.4 sq. ft Luwa APP, CS constr., FV & 600psi 75 HP
(1) 141 Sq. Ft. Rodney Hunt Turbo-Film, 316 SS 15 psi int., 35 psi jkt 40 HP XP

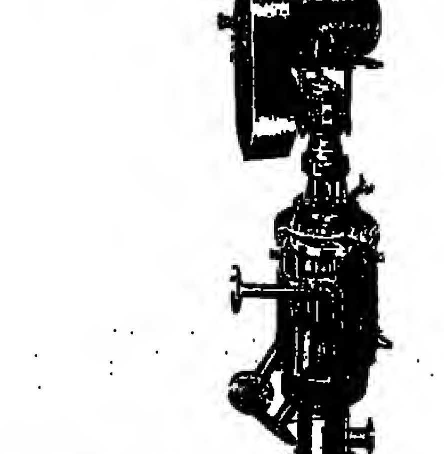
BLENDERS

800 Cu. Ft. jktd. Dbl.Rbn. CS
Approx. 480 Cu. Ft. CS, 75HP
UNUSED 480 Cu. Ft. Marion Paddle, CS, 75 HP
300 Cu. Ft. CS Dbl. Cone, 30 HP
200 Cu. Ft. KS 316SS Dbl. Cone
175 Cu. Ft. P-K Twin Shell, 316SS
75 Cu. Ft. P-K "V", with liq./solids bar, sanit. 304 SS, 60#/cu ft. max. density
69.3 Cu. Ft. CS Dbl. Cone, 7.5 HP
63 Cu. Ft. Marion Paddle, CS
62.5 Cu. Ft. J. H. Day dbl. rib., CS Constr., 7.5HP
60 Cu. Ft. 304 SS P-K Twin Shell, w/int. bar
60 Cu. Ft. Gemco Dbl. Cone, 304SS
50 Cu. Ft. CS Dbl. Cone
45 Cu. Ft. CS Ribbon
30 Cu. Ft. P-K 304 SS W/liq. bar.
25 Cu. Ft. CS Ribbon
20 Cu. Ft. P-K Twin shell, SS
15 Cu. Ft. Robinson Dbl. Rbn. CS
15 Cu. Ft. WC Marion SS
12 Cu. Ft. CS Ribbon
10 Cu. Ft. Gemco dbl. cone, CS, 1½HP
10 Cu. Ft. P-K Sanit. Twin Shell, 1½HP
10 Cu. Ft. Howes, CS Dbl. Rbn.
8 Cu. Ft. CS Ribbon

FILTERS

Pressure Leaf
1–562 Sq. Ft., 316ELC, Hercules, 28 leaves
1–512 Sq. Ft., 316SS, Niagara, 21 leaves
2–400 Sq. Ft. R/L Sparkler
1–327 Sq. Ft., 304SS, Ind. Filter, 11 leaves
1–320 Sq. Ft. Durco 316 SS, 11 Leaves
1–259 Sq. Ft. Pronto Mdl. #3259, 75 psig
1–Approx. 206 Sq. Ft., SS, Sparkler, Horiz.
1–200 Sq. Ft., SS, Hercules, Horiz.
1–191 Sq. Ft. Enzinger, SS, Vert., 75 psi
1 – 157.64 sq. Ft. Sparkler model 55-5-28, 316SS
1–150 Sq. Ft. Horiz., 12 Vert. Leaf 316SS
1–135 Sq. Ft. Ni, Bowser, Vert.
1–60 Sq. Ft. Enzinger, Vert. Leaves, 316ELC SS jkt., 75/15 psi
1–35 Sq. Ft. Hercules Model 5, 316 SS, horiz. tank vert leaves 50 psi

Rotary Vacuum
1–56.5 Sq. Ft. KS, Inconel 600
2–56.5 Sq. Ft. K-S, 316SS, flexibelt disch.
1–87.92 Sq. Ft. Feinc, SS wetted parts, spring disch., 56" dia. x 6' face drum
1–132 Sq. Ft. Dorr Oliver, 304SS, maxi-belt disch.
1–200 Sq. Ft. Elmco, 316SS, 8'x8'
4–250 Sq. Ft. D.O. 316L SS Precoat, 8" x10', sanit
1–250 Sq. Ft. K-S 316SS, coil disch.
1–300 Sq. Ft. Elmco, 316SS wetted parts, precoat type w/knife disch., 10" dia. x 10' drum, complt. w/control panel & aux. equipment
1–302 Sq. Ft. K-S 316SS, flexibelt disch.
1–314 Sq. Ft. Elmco, precoat disch., 316SS
1–400 Sq. Ft. Elmco, CS, Precoat
1–500 Sq. Ft. Elmco, 316SS, belt disch.
1–3'x1' 316SS, Knife disch.
1–3'x1' Dorr Oliver, FRP w/receiver & Nash H4 vac pump, 10 HP



Not actual photo

1 - Approx. 51 Sq. Ft., Pfaudler, Wiped Film Evapor. 316 SS wetted parts ASME Coded, built 1968. Jacket rated 100 psi w/internal vacuum. Complete w/-flange mounted motor to Pfaudler TW drive w/mechanical seal, lubricator & integral heat exchanger.

Call today for more details.

MANY MORE ITEMS IN STOCK-CALL IDM TODAY!

GLASS...GLASS...GLASS

WE ARE GLASS SPECIALISTS WITH A TREMENDOUS INVENTORY FEATURING UNUSED, USED AND REGLASSED ITEMS. OUR SHOP PERSONNEL ARE FULLY TRAINED TO HANDLE GLASS.

REACTORS

Glass Lined
4,000 Gal. Pfaudler, 100/90 psi, TW
1,000 Gal. Pfaudler, 100&FV/90 psi, 4RW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4DW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4TW
800 Gal. SS clad, 60/60 psi
750 gal. DeDietrick, Phila drive
500 Gal. Pfaudler, 100&FV/85 psi, BH drive
500 Gal. Pfaudler E-series, 4 TW Drive
200 Gal. Pfaudler, 25/90 psi
75 Gal. Pfaudler, 25 & FV/85 psi, 2 HP
50 Gal. Pflauder Body-UNUSED, 25 FV/-100psi

*Partial Listing - Much More Inventory Glass Lined Storage Tanks & Parts also Available.

Stainless Steel
4,000 Gal. 316SS, Atmos./50 psi, with coils
3,000 Gal. 347SS Blaw Knox, 150/50 psi
2,500 Gal. 316L SS, 75/75 psi, 150 psi int. coils
2000 Gal. Nooter Autoclave, 316L 2000 psi, FV int. coils
2,000 Gal. Dusenberg, 316 SS, 15/35 & FV int., 50 psi jkt.
1,750 Gal. 316SS Nolte, 1467/50 psi
1,500 Gal. 304SS, 10 HP Lightnin
1,000 Gal. 316SS, atmos./75 psi dimple jckt., 100 psi coils
1,000 Gal. 304SS, 250/80 psi
1,000 Gal. 316SS, 50M/75 psi jkt & 2000 psi coils
750 Gal. 316S, 75 & FV/50 psi
750 Gal. 304SS, 50/60 psi
600 Gal. 316SS, 3000psi, 10 HP
600 Gal. SS, 50 psi, 1.5 HP XP
500 Gal. 316SS, 55 & FV/55 psi
100 Gal. 316SS, 15/50 psi
100 Gal. 316ELC SS, 500/90 psi
100 Gal. Theo. Walters, 15 psi shell, 75 psi jckt & coils, w/Lightnin mixer

★★★ SPECIAL OFFER ★★★
1-UNUSED, never installed Krauss Maffei Turbo Tray Dryer, 29 trays, 9' 9" dia., 316 L SS, all other wetted parts 316 SS, complete unit.
PRICED TO SELL

MIXERS

4.5 Gal. Kneader Master Cont., SS w/jkt.
5 Gal. AMK 304SS Jcktd. Kneader Extruder
15 Ga. W.C. Readco Sigma Blade Dbl. arm
80 Gal. Hockmeyer Pony, SS contacts, 7.5 HP varispeed
100 Gal., SS, Sigma Blade, Jcktd. 40 HP
200 gal. W-P CS dble arm Sigma blade, 20 HP
250 gal. AMK Kneader Extruder, Sigma Blades, CS construc. 40 psig, trough jkt.
300 Gal. Baker Perkin CS Sigma Blade, jktd.
500 Gal. S-W Rubber Cement, CS, 2-10 HP motors (2)
Unused 1000 Gal. Sanitary 316SS B-K Dbl. Motion Change Can; 100&FV/165 PSI, 125HP
Littleford Model FKM-2000, SS, w/choppers
Prodex Henchel 3.5 Cu. Ft. Mdl. 35 J SS, SS Consl.
7 Cu. Ft. 304SS Nauta Model MBX-70
10.6 Cu. Ft. Nauta D-105, CS
48 Cu. Ft. Marion Paddle, sanit. SS, 20 HP
50 HP Meyers Disperser, 2/500 gal. CS tank, v-speed & hydr. lift
20 HP Cowles Hi Speed Disperser
15 HP Hockmeyer Hi Speed Disperser
Welding Eng. Model 2FV1V2S Twin screw Extruder, SS, Contacts, 150 psi

PLUS LOTS - LOTS MORE

RIGGING
DISMANTLING
RE-ERECTION
DEMOLITION

INTERNATIONAL **IDM**
Int'l. Dismantling & Machinery Corp.
P.O. BOX 288 SOUTH RIVER, N.J. 08882-0288
(201) 390-9550

LICENSED ASBESTOS REMOVAL
(201) 390-9550
TELEX: 642-863

ALWAYS BUYING & SELLING SURPLUS PLANTS & EQUIPMENT

CMR MARKETPLACE

CHEMICAL MARKETING REPORTER'S CLASSIFIED ADVERTISING SECTION

COPY DEADLINE: Wednesday Noon preceding date of publication.

RATES/Classified Ads: $57.75 for 36 words or less; $9.75 for each additional six words or fraction. No display. First two words printed in bold face type. Non-display advertisements payable in advance, except for contract customers (not subject to agency commission).

REPLIES: Send replies to classified ads with box numbers to **CHEMICAL MARKETING REPORTER,** 100 Church St., New York, NY 10007-2694.

INFORMATION: For further classified advertising information, call **212/732-9820.**

BUSINESS OPPORTUNITIES

Development Chemist Ground floor position in kilo lab active in pharmaceutical synthesis. Possible Junior Partnership. Send resume to Box #CMR-690.

If you are an independent representative involved in process equipment sales to the Chemical Industry and are interested in a unique and innovative approach to adding commission dollars, especially from those deals that look like they are getting away, write me, Dante Murray, CMR Box 678. All replies in strict confidence.

CHEMICALS OFFERED

Formadelhyde 165,000 gallons (11,000 drums x 15 gallons) Military MIL-E-1006D Arterial Fluid, MIL-E-1439D Cavity Fluid, available warehouse 15 miles north of Richmond, Virginia. Immediate sale to best offer. Contact CMR-694.

For Sale: Aspirin 650 mg sustained-release tablets packaged in 100's; Phenylpropanolamine HC1 75 mg sustained-release tablets packaged in 30's. Both with Registered trademarks. Verex Laboratories, P.O. Box 3817, Englewood, CO 80112. (303) 799-4499.

Recycled Perchloroethylene, Methylene Chloride, N-methyl-2-pyrrolidone, and Freon TF available in drums or bulk. Chemical Solvents, Inc. (800) 321-8506. In Ohio call (800) 362-0693.

"Vanadium Pentoxide, Hi Purity, 99.9+%. We are overstocked and wish to lighten our inventory. Packed in original sealed containers from known suppliers. Call M. Becker or J. Holland at (201) 641-0500.

CHEMICALS WANTED

Active Buyer of surplus chemicals, pigments, dyes, resins, waxes, plastics etc. Call toll free 1-800-631-3337 or 617-829-6736. Deer Polymer Corp. Chemical Div. 17 Industrial Drive, Holden, MA 01520.

All Surplus — Chemicals — Resins — Oils — Colors Solvents — Plasticizers — Specialties — Intermediates — bought by: Rambach Chemical Co., Inc. 52 Vesey Street, PO Box 5187, Newark, NJ 07105. Phone: (201) 589-7774.

Cash For your surplus chemicals, resins, colors, pharmaceuticals, dyes, other raw materials, by products, wastes, residues and off-spec materials. Morgan Chemicals Inc., 5500 Main Street, Williamsville, NY 04221 (716) 632-4000; Telex 919133.

Realize Top Value from the sale of your surplus Chemicals. We buy surplus Chemicals, Plastics, Resins, Waxes, etc. Bonmar Chemical Co., P.O. Box 494, Fair Lawn, NJ 07410. Phone: (201) 791-2448; Telex: 13-0434.

Resyn Corp. will buy your surplus chemicals, resins and resin raw materials — prime or off-specification, Resyn Corp. P.O. Box 63, 1540 W. Blancke St., Linden, NJ 07036. (201) 862-6787.

We Buy Surplus chemicals, colors, resins, solvents, plasticizers by-products, etc. Over 50 years of service to industry. Eastern Color & Chemical Co., Inc. 65 Roosevelt Ave., Dept. C.P.O. Box 1029, Valley Stream, N.Y. 11582. (516) 791-4445.

Your Surplus is our inventory. We buy all chemicals, pigments, resins, solvents, plasticizers and pharmaceuticals. Prompt inspection and cash terms on each offering. Pyramid Chemical Sales Co., 1035 Virginia Drive, Fort Washington, PA 19034. (215) 542-9292.

You Need It — You Name It — We'll Find It. Whether it be hard to find items or your everyday needs, let our team of professional buyers make your job easier. Give us your needs and let us do your shopping for you. National Buying Services, Lafayette, Indiana 1-800-428-7857.

EQUIPMENT OFFERED

Sandvik cooling belt/flaker, 1974, 23' overall, 32"x17'6" belt, 11'9" cooling, bottom spray, vari-speed drive 8-56 fpm. explosion proof, ss belt with Pastillator drop former, 106 nozzles, clean, new epoxy paint, manuals and drawings (201) 586-9800.

EQUIPMENT OFFERED

For Sale: Gas Chromatograph, Fisher Model-2400. Price: $5,000.00 (19) 1-16,000 gal. S/S Vertical Tank, S/S Dimple Jacket-175 PSI, Price: $22,000.00. (25) 4,400 gal. S/S Vertical Tanks, ½" Thick, Dished Heads., (14) 300 gal. 304 S/S Vertical Tanks, 20 PSI, Cone Bottom, Price: $500.00 Ea. (Unused) 2,600 gal. C/S Vertical Tank, 150 PSIG. Price: $3,500.00, (Many) Pumps-Stainless & Other Alloys. Plus Morel Write: Sun-Belt Equipment Co., Inc., P.O. Box 492, Fountain Inn, S.C. 29644. Tel: (803) 855-3047, OR 855-3048.

Tank Bargains! Priced at $2000 ea. Blue Glass Lined Tanks, 12,000-19,000 gal. ea. F.O.B. truck Detroit. Free listing. R. Martin, Box 727, Detroit, MI 48231. Others at Wisconsin location.

EQUIPMENT WANTED

Sharples vertical pressure centrifuge P6000, P6800 or P5000 horiz. Krauss Maffei vacuum plate dryer, Wyssmont ss dryer. Data and pricing to CMR Box-691.

PLANTS OFFERED

Chemical Engineering shop for sale in Southern California. Design & Construction of small chemical plants or pilot plants. I want to retire and will negotiate terms with a serious engineer. Ideal for 2; one in the field and one in the shop. Maturity and experience mandatory. Very little or no down payment to the right person. 3/4 million dollar backup inventory on consignment. Low overhead, 2 offices, drafting room, lab and 2,000 sq. ft. shop & warehouse. Send brief background and if promising, I'll send you complete details. Reply CMR Box No. 683.

POSITIONS OFFERED

A N.Y. based importer seeking a workaholic type aggressive salesperson for Pharmaceuticals, Intermediates and specialized chemicals, preferably with own accounts. Send resume to CMR Box 686.

Chemical Traffic - NYC based import distributor. Bulk/packaged. All aspects including inventory control, insurance claims, MSDS. Please send resume with salary requirement to Chemical Marketing Reporter Box CMR-693.

Industrial Chemical Salesman — Experienced-Knowledge of Water and Waste Treatment Chemicals Helpful — Territory includes NY, NJ, CT, PA—Permanent Position W/84 year old company — Salary and Expenses — Send Resume to CMR #692.

Petroleum Wax salesman wanted with technical background for domestic travel. Write Chemical Marketing Reporter, Box 684.

Senior Chemical Sales Representative. Jarchem Industries is a moderate-sized growing chemical manufacturer whose major products include Acetate Salts, Bulk Solutions, as well as Custom Manufacturing. We have an opportunity for a Senior Sales Representative to handle major accounts and new projects. Chemical sales experience and some technical background required. Location will be at our facility in Newark, N.J. Moderate travel required. Competitive salary commensurate with experience, background and results. This is a good growth opportunity for the right person. Please send resume including salary history to: Jarchem Industries, Inc., 40 Ball Street, Newark, New Jersey 07105.

POSITIONS WANTED

Ph. D. ~20 years diversified pharmaceutical experience raw material to product capability wet, dry, etc. U.S. and worldwide manufacturing experience prefer tri-state location. Interested in eventual financial participation. Reply CMR Box 689.

SERVICES OFFERED

Custom solids packaging and distribution in the port of Mobile, Multi-wall bags, bulk bags, drums and bulk, Screening, repackaging and warehousing. Rail and truck facilities. Contact: Philip Hahn, SEAPAC, 1250C Armour Ave., Mobile, AL 36607, (205) 473-1722.

EDC Plant Mothballed By Lyondell Petrochemical

Lyondell Petrochemical Company said last week that it will mothball its 600-million-pound-per-year ethylene dichloride facility in Baton Rouge, La., on July 31. The company cited "poor profitability and worldwide overcapacity" as reasons for the shutdown.

The facility is operated by U.S. Industrial Chemicals Company. USI employs about 50 people at the plant and says it will attempt to place those workers in other areas within the company.

Lyondell says it has inventory on hand for customers and has also made "other arrangements" for longer term supplies.

According to Lyondell, the shutdown is not permanent, and the facility will be reopened "when market condition improve."

Total US demand for EDC is projected to reach 12.9 billion pounds in 1986. After Lyondell shuts its plant down domestic capacity will total 15.84 billion pounds.

Olin Shuts Down Plant

Olin Corporation announced last week that it is shutting down its small specialty chemicals plant in Wilmington, Mass. The chemicals produced at this plant are sold to a variety of markets ranging from agricultural chemicals to plastics, and these chemicals will now be produced at and/or shipped from the Olin locations.

BP Pushing

Continued from Page 3

by Mobil Chemical Company and Exxon Chemical Company.

Last year imports from the Middle East are estimated to have reached 145,000 tons, giving Saudi producers around 35 percent of the European LLDPE market.

In 1985, total linear low sales in Europe increased by 37 percent and this year are expected to go up by 24 percent to around 510,000 tons. Last year, low density sales grew by only 5.8 percent to 3,930,000 tons and this year is predicted to drop by 5.1 percent to 3,730,000.

Linear low's share of the polyethylene sector is expected to rise to 12 percent this year from 7.5 percent in 1984.

BPCI reckons that the LLDPE growth rate from now on will follow much the same pattern as in the US, where the product's share of the total low density market has jumped from around 10 percent in the early '80's to nearly 50 percent at present.

Saudi producers now dominate the commodity end of the linear low market in Europe, leaving Dow Chemical Europe, CdF Chimie and Atochem of France, DSM of the Netherlands and BPCI as the major factors in the specialties part of the sector.

So far much of the growth of linear low has come from exploiting the performance advantages of the material over conventional high-pressure LDPE in the main, non-film applications such as injection molding, rotomolding, pipe and blow molding. There has also been a lot of blending at low levels into LDPE film.

"As film is the dominant volume market in polyethylene," explains Bev Price, BPCI's marketing manager for polyethylene, film applications, "further growth depends upon a switch to the use of pure LLDPE or at least linear-rich blends in the major film applications."

LINEAR LOW IN STRETCH WRAP

Linear low has already made big inroads in the stretch wrap sector where it accounts for 80 percent of sales but in other areas of the film market its share remains relatively small.

Over the next five years, the biggest growth in film applications is expected to be in heavy-duty sacks, liners and carrier bags with share rising to 50 percent in each market by 1990 and refuse bags and lamination/coextrusion. Altogether, linear low should have 25 percent, of the low-density market in film by 1990.

In other markets, linear low's share of low density sales is predicted to increase to 40 percent (from 8 percent at present) in injection molding, and to 25 percent in pipe and 15 percent in wire and cable by 1990.

A lot will depend on the willingness of converters to switch to the new machinery necessary for LLDPE use.

"With the current state of low profitability and price instability in the market it has been difficult for them to justify changes of machinery," Mr. Price admits.

BPCI believes that its gas-phase process which uses a Ziegler catalyst system developed at Lavera enables it to produce a higher quality product.

The system has a rate of reaction less temperature dependant than rival processes so that risks of hot spots are eliminated. As a result the end product is consistently without lumps or fish eyes.

At present, the process produces a broad range of butene-based LLDPE copolymers. BPCI is also developing a new range of higher alpha-olefin polymers based on 4 methyl pentene-1.

4 MP-1 from a plant being built at Grangemouth will be used with butene and ethylene to produce terpolymers to make products of high clarity and strength which BPCI claims will be better than any competing hexene or octene-based LLDPE products.

The company's strategy is that while Saudi output helps to expand the commodity sector, its special grades of linear low will have a big impact on the upper end of the market where the Middle East producers will be reluctant to compete.

"If we are to sell our full output from Lavera, we will have to go into the commodity end at first," says Michel Depraetere, BPCI's business general manager for polyolefins. But BP's intention is to move to the higher end of the market with specialty, differentiated products, he says.

At present, the Lavera plant, which can be switched from linear low to HDPE manufacture without stopping production, is mainly producing high density, with linear output only amounting to 25,000 tons. However, this is expected to be raised to 60,000 tons by the end of the year.

Besides having what it regards as a highly efficient production process, BPCI also believes that the location of the Lavera plant in the northwest Mediterranean enables it to take advantage of the cheaper transportation costs of naphtha coming in from the Middle East and North Africa.

A new plant at Grangemouth on the western coast of Scotland would be fed with ethylene made from North Sea ethane.

But Mr. Knowland does not rule out the possibility of the second LLDPE plant being built in Germany instead — possibly at the Erdolchemie site at Worringen.

"It's an option we are looking at," says Mr. Knowland. "Clearly in a market like West Germany we have to consider ways of exploiting it better."

UK AND FRENCH MARKETS

At the moment the company's two main markets for linear low are the UK and France, where it has 30 percent of sales, but it still needs to strengthen its position in Germany.

It hopes to take advantage of continued restructuring in the European polyethylene industry.

"One of the appalling things about this sector is the excess of producers," says Mr. Knowland. "How can all the 15 existing producers in Europe hope to be successful in the medium or long term in such a highly technical industry? Not all of them can expect to do proper research, give a first class service to their customers and at the same time keep the European plastics industry ahead of its rivals.

"We are looking forward to the time when the number of producers has fallen below 10 or even as low as six," he says.

BPCI claims it has taken a lead in restructuring in recent years, the latest example of which is a rationalization deal in polypropylene with Atochem (CMR, 6/2/86, pg. 3).

ADVERTISERS' INDEX

A-1 Chemical Equipment Co.	47
Aaron Equipment Company Division, Areco, Inc.	44
Agrico Chemical Co.	28
Agro Ingredients, Inc.	12
Akzo Chemie America	2
Anar Chemical Company	12
Arizona Chemical Company	1
Ashland Chemical Company	1,8
Atlas Refinery, Inc.	11
BASF Corp.	1,6
Baldwin Industrial Liquidators, Inc.	48
Barco International Corp.	49
Berlichem	22
CP Chemicals, Inc.	27
CPS Chemical Co.	52
R.P. Cargille Laboratories, Inc.	48
Centerchem, Inc.	23
Chemcentral Corporation	10
CheMarketing International	12
China National Chemicals Imports & Export Corp.	11
Church & Dwight Co., Inc.	19,21,23
Clearing Container Inc.	30
Colgate-Palmolive Phils., Inc.	12
Concord Chemical Company, Inc.	52
Corco Chemical Corp.	24
Cyanamid Canada Inc.	17
Davos Chemical Corporation	52
Deepwater Chemical Co., Ltd.	52
Duphar Nutrition, Inc.	24
Equipment Equities Corporation	49
Fairmount Chemical Co., Inc.	52
Fallek Chemical	26
Fanwood Chemical, Inc.	40
Federal Equipment Company	41
Genes Chemicals, Inc.	25
George Equipment and Machinery Co.	47
Grain Processing Corporation	18
Groelt, R.W. & Co., Inc.	1
H&P Equipment Co., Inc.	47
Hardwicke Chemical Co.	13
Helco, Inc.	21
Humphrey Chemical Co.	14
Igene Biotechnology, Inc.	14
Interchem Corporation	25
International Dismantling & Machinery Corp.	30,45
International Translation Service	19
Jarchem Industries	26
Kaiser Chemicals	27
Kali Chemie Corp.	21
Knoll Fine Chemicals, Inc.	20
M.C. LeBarr	43
Louisiana Chemical Equipment Co., Inc.	43
Machinery & Equipment Corp.	50
Madison Equipment Co., Inc.	49
Meer Corporation	30
J. Little Mercer Co., Inc.	43
Miles Laboratires, Inc.	23
Mitsubishi International Corp.	29
Mitsui & Co. (U.S.A.), Inc.	16
Monico Research Products, Inc.	14
Montedison USA, Inc.	14
Napp Chemicals, Inc.	15
Orsynex Inc.	24
The PQ Corporation	14
Perry Equipment Co. Inc.	46&47
Pfizer Inc.	25
PMP Fermentation Products, Inc.	16
Prior Chemical Corporation	1
Prochimie International	21
Robeco Chemicals, Inc.	52
Ruetgers-Nease	13
SRS, Inc.	52
S.S.T. Corp.	23
Sentury Reagents, Inc.	21
Sheffield Products	21
Sipsy	25
Werner G. Smith, Inc.	11
Specialty Chem Products Corporation	19
Spectrum Chemical Mfg. Corp.	25
Standard Chlorine Chemical Co., Inc.	15
Stuart Equipment Co.	47
Tanabe U.S.A., Inc.	16
Texaco Chemical Company	17
Thompson-Hayward Chemical Co.	29
Thorson Chemical Corporation	52
Uniroyal Specialty Chemicals	14
Union Carbide Corp.	18
Upjohn Chemical Company	12
U.S. Borax & Chemical Corporation	1
Universal Process Equipment, Inc.	42
Videx Machinery Corp.	48
Virginia Chemicals Inc.	1
Wabash Power Equipment Co.	47
Jim Walter Resources, Inc.	15
Weinstein Chemicals, Inc.	21
Wesco Technologies, Ltd.	26
Witco Corporation	11,15,28
White Cross Laboratories, Inc.	26

CHEMICAL PROFILE

POLYVINYL CHLORIDE JUNE 9, 1986

SUPPLY

PRODUCER	CAPACITY*
Air Products, Calvert City, Ky.	200
Air Products, Pensacola, Fla.	200
Borden, Geismar, La.	350
Borden, Illiopolis, Ill.	320
CertainTeed, Lake Charles, La.	220
Formosa, Delaware City, Del.	330
Formosa, Point Comfort, Tex.	890
Georgia-Gulf, Delaware City, Del.	150
Georgia Gulf, Plaquemine, La.	700
BF Goodrich, Avon Lake, Ohio	280
BF Goodrich, Deer Park, Tex.	240
BF Goodrich, Henry, Ill.	180
BF Goodrich, Louisville, Ky.	280
BF Goodrich, Pedricktown, N.J.	340
BF Goodrich, Plaquemine, La.	180
Goodyear, Niagara Falls, N.Y.	120
Keysor, Saugus, Calif.	50
Occidental, Baton Rouge, La.	300
Occidental, Burlington, N.J.	250
Occidental, Pottstown, Penn.	200
Occidental, Pasadena, Tex.	700
Shintech, Freeport, Tex.	1,000
Union Carbide, Texas City, Tex.	125
Vista, Aberdeen, Miss.	360
Vista, Oklahoma City, Okla.	355
Vygen, Ashtabula, Ohio	100
Total	8,420

*Millions of pounds per year of PVC resin and copolymer. Capacities vary with product mix. Borden maintains 160 million pounds of PVC capacity on standby at Leominster, Mass. Formosa has added over 400 million pounds of capacity in recent years through debottlenecking at Delaware City and Point Comfort. GenCorp (formerly General Tide and Rubber) sold its Ashtabula plant to Vygen earlier this year. Diamond Shamrock closed its Deer Park, Tex. plant three years ago. Goodrich closed its 150-million-pound-per-year Long Beach, Calif. resin plant in early 1985. Occidental purchased Tenneco's PVC assets in April. Oxy bought a 100-million-pound unit in Burlington, (in addition to an existing Oxy unit there) and a 700-million pound plant in Pasadena, which Oxy says can be expanded by another 10-15 percent. Tenneco closed a smaller unit in Flemington last Fall. Pantasote, a PVC compounder, stopped producing resin at Passaic, N.J. two years ago. Shintech added over 300 million pounds of capacity at Freeport in Aug. 1984. Profile last published 6/27/83; this revision, 6/9/86.

DEMAND

1985: 6,700 million pounds; 1986: 6,900 million pounds; 1990: 7,800 million pounds.

GROWTH

Historical (1976-1985): 4.0 percent per year; future: 3 percent per year through 1990.

PRICE

Historical (1963-1986): High, 39½c. per pound, homopolymer, suspension

Continued on Page 15

BUSINESS BRIEFS

AMOCO CORPORATION will reduce the workforce in its staff departments by approximately 400 by the end of this year. The program will be implemented between now and December 31, with each department developing its own timetable for staff reductions, the company says. "Reductions will be made where we can consolidate some positions to make operations more efficient and keep Amoco competitive within the industry," Amoco adds.

DOW CHEMICAL Company will add a new $5 million high-speed pilot coater at its Midland, Mich. headquarters to serve the coated paper industry. Scheduled for completion in the second quarter of 1987, the facility will be located near an existing pilot coater and will be completed just as industry capacity for high-speed coated publication paper is expected on line. The new Dow pilot unit is designed for operating speeds of 6,000 feet per minute.

DU PONT Company will sponsor jointly with the National Food Processors Association awards for innovation in food packaging technology. Any new food product, package or process used in food production involving packaging with plastic materials and first marketed or put into commercial use in North America between July 1, 1985, and December 1, 1986, is eligible for the competition. Winners will be announced at the NFPA convention, January 24-28, 1987.

E.R. SQUIBB & Sons, Inc. and Abbott Laboratories, Inc. will set up a joint agreement whereby Squibb's "Azatam", and possibly a number of other Squibb intravenous drugs, will be marketed as part of Abbott's "Add-Vantage" IV drug admixture system. Squibb is awaiting government approval for its product. Abbott's system was approved in September, 1985.

WESTVACO CORPORATION's Chemical Division has completed new plant facilities at its Charleston, S.C., location for the production of tall oil-derived asphalt additives. In addition, paper size manufacturing facilities are being installed at the company's tall oil refinery in Charleston.

JOBS & PEOPLE JOBS & PEOPLE

Douglas A. Corbishley, who has been elected vice-president for European operations at National Starch & Chemical Corporation. He was most recently divisional vice-president of European starch operations.

Degussa Corp. Names Sales, Product Managers

Degussa Corporation has appointed Richard Gustafson regional sales manager in the Chemicals Division and Nicole M. Mueller a product manager in the Pigments Division.

Mr. Gustafson will be responsible for sales of hydrogen peroxide and Degussa's complete chemical line in Minnesota, Wisconsin, North and South Dakota and upper Michigan.

Miss Mueller will be responsible for developing and implementing product marketing strategies for Degussa's precipitated silica product line.

R. Gustafson

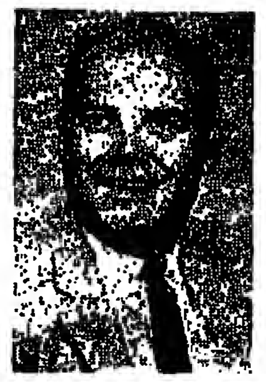
N. Mueller

KERRY J. PFRIMMER has been appointed to the newly-created position of senior field sales representative for ETD Technology Inc... **CHARLES F. PUTNIK** has joined A.E. Staley Manufacturing Company as marketing manager for surfactants in the firm's Chemicals Division... **MARY R. RICE** has been named business manager for color dispersions at Harshaw/Filtrol Partnership.

J.M. WILLIAMS has been appointed executive vice-president of Chemcentral Corporation... **GEORGE SLOTH** has been named vice-president for Group 1 Sales at Jacqueline Cochran Inc., a division of American Cyanamid Company... **LAWRENCE WASOWSKI** has been appointed technical manager of the Coatings & Adhesives Division of AZS Corporation.

JAMES J. BARBARITO has been named market manager of the new plastics additives market development group at Eastman Chemical Products Inc... **WILLIAM J. MAZZAFRO** has been appointed senior process manager for chemical technology at Air Products & Chemicals Inc. **WILLIAM J. GODFREY** has joined Glenbrook Laboratories as vice-president of marketing.

AL WILUNOWSKI has been appointed general manager of Varian Associates Inc.'s Palo Alto, Calif., Instrument Division... **PHILIP A. CAMMARANO** has been named vice-president of finance and administration at Union Carbide Corporation and **MALCOLM A. KESSINGER** has been appointed vice-president of human resources and environmental affairs.



K. Pfrimmer

C. Putnik

M. Rice

J. Williams

Howard W. Gross, who has been appointed general manager of Diamond Shamrock Chemicals Company's Process Chemicals Division. He was previously international business manager for the Process Chemicals Division.

EDWARD W. MEHRER has been named vice-president of accounting and financial reporting at Marion Laboratories Inc... **J.D.F. BARNES**, chairman of Imperical Chemical Industries PLC's Paints Division, has been appointed an executive director of London-based ICI... **JAMES E. CLAGGETT** has been named business manager of low density polyethylene and linear low density polyethylene at Enron Chemical Company, formerly Norchem Inc.

C. WENDELL BERGERE JR., PHILIP C. DANFORD, and **JULIANNE A. GRACE** have been elected corporate vice-presidents of Perkin-Elmer Corporation.

WILLIAM P. HULLIGAN and **FRED J. WEINERT** have been elected vice-presidents of Waste Management Inc... **GUS WADE** has been named regional product manager for adhesives and tapes by Commercial Plastics & Supply Corporation.

G. Sloth

L. Wasowski

Carbide's Amerchol Adds Sales, Marketing Posts

Amerchol has named Ira Altman national sales manager and Frank Freiler marketing manager.

The company says the addition to its sales and marketing operations are part of its plan to expand product line and service capabilities following the acquisition of Amerchol by Union Carbide Corporation.

Amerchol supplies raw materials to the personal care industry. Products include lanoline and derivatives, methyl glucoside derivatives, water-soluble polymers, proteins, sunscreens and other specialty chemicals.

I. Altman

F. Freiler

J. Barbarito

W. Mazzafro

C. RUSSELL TANTON and **STEPHEN C. ISAACS JR.** have been appointed technical sales representatives for "Tecnoflon" fluoroelastomers at Montedison USA Inc...

RENE R. BROCHU has been named national accounts manager for fine chemicals at American Cyanamid Company.

MEETINGS CALENDAR

JUNE 9, 1986

THIS WEEK

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, "Detergents '86" workshop, Ramada Hotel O'Hare, Rosemont, Ill., June 13.

DRUG CHEMICAL & ALLIED TRADES ASSOCIATION, Spring luncheon, Sheraton Centre Hotel, New York, June 12.

FERTILIZER INSTITUTE, 1986 marketing conference, The Greenbrier, White Sulphur Springs, W. Va., June 8-11.

SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION, seminar on Anglo-American technology exchange and trade, jointly with Drug, Chemical & Allied Trades Association and National Economic Development Office, London, England, Sheraton Centre Hotel, New York, June 11.

THIS MONTH

AMERICAN ASSOCIATION OF SMALL RESEARCH COMPANIES, second annual chemical innovation conference, Marriott Hotel, Saddle Brook, N.J., June 19-20.

EUROPEAN PETROCHEMICAL ASSOCIATION, luncheon meeting, "The Changing Nordic Petrochemicals Industry and Its Future," Sheraton Hotel, Copenhagen, Denmark, June 20.

INSTITUTE OF FOOD TECHNOLOGISTS, 46th annual meeting, Dallas Convention Center, Dallas, Tex., June 15-18.

INTERNATIONAL FERTILIZER DEVELOPMENT CENTER, workshop on fertilizer sector development in Africa, IFDC headquarters, Muscle Shoals, Ala., June 16-27.

INTER-SOCIETY COLOR COUNCIL, 1986 annual meeting, Ryerson Technical Institute, Toronto, Ontario, Canada, jointly with the Canadian Society for Color, June 15-18.

NATIONAL ASSOCIATION OF PHARMACEUTICAL MANUFACTURERS, mid-year meeting and seminar, Waxman-Hatch amendments, R, drug advertising, Hyatt Regency Hotel (Crystal City), Arlington, Va., June 17-18.

JULY

AMERICAN ASSOCIATION FOR CLINICAL CHEMISTRY, laboratory products exhibition, McCormick Place, Chicago, July 15-17.

CHEMICAL MARKETING RESEARCH ASSOCIATION, basic short course on marketing research, Sheraton Centre Hotel, New York, July 14-16.

FRAGRANCE FOUNDATION, first international conference, "The Psychology of Perfumery," organized by Warwick Olfactory Research Group, University of Warwick, Coventry, UK, July 22-25.

LATER ON

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, annual Winter meeting, Miami Beach, Fla., November 2-7.

AMERICAN MICROCHEMICAL SOCIETY, eastern analytical symposium, jointly with American Chemical Society and Society for Applied Spectroscopy, New York Hilton Hotel, New York, October 20-24.

AMERICAN PETROLEUM INSTITUTE, annual meeting, San Francisco, Calif., November 9-11.

CANADIAN CHEMICAL PRODUCERS ASSOCIATION, international symposium on transportation emergency response, Vancouver, B.C., Canada, September 14-18.

CHEMICAL MARKETING RESEARCH ASSOCIATION, world chemical congress, jointly with the chemical marketing and economics division of the American Chemical Society, "The Chemical Industry: Where in the World is it Going?", Newporter Resort Hotel, Newport Beach, Calif., September 7-10.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, 73rd annual meeting, Marriott's Harbor Beach Resort, Fort Lauderdale, Fla., December 7-11.

CHLORINE INSTITUTE, Fall meeting, The Homestead, Hot Springs, Va., September 21-25.

COMMERCIAL DEVELOPMENT ASSOCIATION, impact of mergers and acquisitions on the future of technology-driven corporations, Hershey Hotel, Hershey, Pa., October 26-29.

CONFERENCE BOARD, business outlook conference, Waldorf-Astoria Hotel, New York, September 24-25.

COUNCIL FOR CHEMICAL RESEARCH, annual meeting, Northwestern University, Evanston, Ill., September 28-30.

COUNCIL FOR RESPONSIBLE NUTRITION, annual meeting, "Health Messages: New Directions and New Opportunities," J.W. Marriott Hotel, Washington, D.C., September 7-10.

EUROPEAN PETROCHEMICAL ASSOCIATION, annual meeting, Monte Carlo, Monaco, September 28-October 1; distribution meeting, October 19-October 22.

FERTILIZER ROUND TABLE, 1986 meeting, Sheraton Hotel, Baltimore, Md., November 17-19.

FIRE RETARDANT CHEMICALS ASSOCIATION, Fall conference on proper processing and selection of flame retardants, Kiaweh Island, S.C., October 19-22.

LATIN AMERICAN PETROCHEMICAL ASSOCIATION, sixth annual meeting, Rio Palace Hotel, Rio de Janeiro, Brazil, November 23-25.

NATIONAL PAINT & COATINGS ASSOCIATION, 99th annual meeting, Atlanta Hilton Hotel, Atlanta, Ga., November 3-5.

PULP CHEMICALS ASSOCIATION, 13th international naval stores meeting, Waldorf-Astoria Hotel, New York, September 15-17.

SOCIETY OF THE PLASTICS INDUSTRY, plastics show and conference — South, jointly with the Society of Plastics Engineers, Georgia World Congress Center, Atlanta, Ga., October 8-10.

TEXTILE ASSOCIATION OF THE PULP AND PAPER INDUSTRY, 1986 polymers, laminations and coatings conference and trade fair, Opryland Hotel, Nashville, Tenn., September 15-17.

UK TECHNICAL CENTER FOR PAPER, PRINTING AND PACKAGING INDUSTRIES, fifth international conference on packaging, Grand Hotel, Bristol, England, October 7-9.